

08/869, 386

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DIALOG ONDISC(TM)

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>>> Enter BEGIN HOMEBASE for Dialog Announcements <<<  
>>> of new databases, price changes, etc. <<<  
>>> Announcements last updated 2Feb98 <<<

\* \* \* New CURRENT year ranges installed. \* \* \*

SYSTEM:HOME

Menu System II: D2 version 1.7.8 term=ASCII

\*\*\* DIALOG HOMEBASE(SM) Main Menu \*\*\*

Information:

1. Announcements (new files, free connect time, price changes, etc.)
2. Database, Rates, & Command Descriptions
3. Help in Choosing Databases for Your Topic
4. Customer Services (telephone assistance, training, seminars, etc.)
5. Product Descriptions

Connections:

6. DIALOG Menus(SM)
7. DIALOG Business Connection(R) and DIALOG Headlines(SM)
8. DIALOG(R) Document Delivery
9. Data Star(R)
10. Other Online Menu Services & Files (MoneyCenter(R), OAG, TNT, etc.)

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/H = Help

/L = Logoff

/NOMENU = Command Mode

Enter an option number to view information or to connect to an online  
service. Enter a BEGIN command plus a file number to search a database  
(e.g., B1 for ERIC).

? b 410

13feb98 09:59:11 User214374 Session D464.1  
\$0.00 0.004 Hrs FileHomeBase  
~~\$0.00 Estimated cost FileHomeBase~~  
\$0.00 Estimated cost this search  
\$0.00 Estimated total session cost 0.004 Hrs.

File 410:Chronolog(R) 1981-1998/Jan

(c) 1998 The Dialog Corporation plc

Set Items Description

? set hi ;set hi

HILIGHT set on as ''

HILIGHT set on as ''  
? begin biochem, 157

>>> 125 does not exist  
>>> 162 is unauthorized  
>>> 352 is unauthorized  
>>>3 of the specified files are not available  
13feb98 09:59:37 User214374 Session D464.2  
\$0.00 0.007 Hrs File410  
\$0.00 Estimated cost File410  
\$0.00 Estimated cost this search  
\$0.00 Estimated total session cost 0.011 Hrs.

SYSTEM:OS - DIALOG OneSearch

File 5:BIOSIS PREVIEWS(R) 1969-1998/Feb W2  
(c) 1998 BIOSIS  
File 40:Enviroline(R) 1975-1997/Nov  
(c) 1997 Congressional Information Service  
File 41:Pollution Abs 1970-1998/Jan  
(c) 1998 Cambridge Scientific Abstracts  
File 68:Env.Bib. 1974-1998/Feb  
(c) 1998 Internl Academy at Santa Barbara  
File 71:ELSEVIER BIOBASE 1994-1998/Jan W4  
(c) 1998 Elsevier Science B.V.  
File 73:EMBASE 1974-1998/Jan W2  
(c) 1998 Elsevier Science B.V.  
\*File 73: EMTAGS no longer in Embase as of 1/98. Type: HELP NEWS 73  
for details.  
File 76:Life Sciences Collection 1982-1997/Dec  
(c) 1998 Cambridge Sci Abs  
File 94:JICST-EPlus 1985-1998/Dec W2  
(c)1998 Japan Science and Tech Corp(JST)  
File 143:Biol. & Agric. Index 1983-1998/Jan  
(c) 1998 The HW Wilson Co  
File 144:Pascal 1973-1998/Jan  
(c) 1998 INIST/CNRS  
File 155:MEDLINE(R) 1966-1998/Mar W4  
(c) format only 1998 Dialog Corporation  
\*File 155: Due to technical problems, 1998 MEDLINE has been  
restored to the 1997 version.  
File 156:Toxline(R) 1965-1998/Jan  
(c) format only 1998 The Dialog Corporation  
File 164:Allied & Alternative Medicine(AMED) 1984-1998/Dec  
(c) 1998 BLHCIS  
File 172:EMBASE Alert 1998/Feb W2  
(c) 1998 Elsevier Science B.V.  
File 173:Adis LMS Drug Alerts 1983-1998/Feb W1  
(c) 1998 Adis International Ltd.  
File 305:Analytical Abstracts 1980-1998/Mar  
(c) 1998 Royal Soc Chemistry  
File 307:DOSE 1997/S2  
(c) 1997 Royal Society of Chemistry  
File 337:CHEMTOX(R) ONLINE 1997/Q4  
(c) 1998 RESOURCE CONSULTANTS, INC.  
File 340:CLAIMS(R)/US PATENT 1950-98/Feb 03  
(c) 1998 IFI/PLENUM DATA CORP  
File 348:EUROPEAN PATENTS 1978-1998/Feb W5  
(c) 1998 EUROPEAN PATENT OFFICE  
\*File 348: \*\*\* All EPO Fulltext data is now online and current! \*\*\*  
New fulltext will be added weekly. See HELP NEWS 348 for details.  
File 351:DERWENT WPI 1963-1997/UD=9806;UP=9803;UM=9801  
(c)1998 Derwent Info Ltd  
\*File 351: Enter HELP NEWS 351 for info. about changes in DWPI coverage.  
Output formats have changed for 1998. Enter HELP FORM351 for details.  
File 357:Derwent Biotechnology Abs 1982-1998/Feb B2  
(c) 1998 Derwent Publ Ltd

File 358:Current BioTech Abs 1983-1998/Feb  
 Royal Soc Chem & DECHEMA  
 File 370:Science 1996-1998/Dec W1  
 (c) 1998 AAAS  
 File 375:Derwent Drug Registry 1997-1998/Feb W3  
 (c) 1998 Derwent Info Ltd.  
 File 376:Derwent Drug File 1964-1982  
 (c) 1995 Derwent Info Ltd.  
 File 377:Derwent Drug File 1983-1998/Feb W2  
 (c) 1998 Derwent Info Ltd.  
 File 399:CA SEARCH(R) 1967-1998/UD=12807  
 (c) 1998 American Chemical Society  
 \*File 399: Use is subject to the terms of your user/customer agreement.  
 RANK charge added; see HELP RATES 399.  
 File 434:Scisearch(R) Cited Ref Sci 1974-1998/Feb W2  
 (c) 1998 Inst for Sci Info  
 \*File 434: Research Fronts, /RF and RF=, will no longer be supplied  
 by ISI starting January 1998. RANK price increase. See HELP NEWS 434.  
 File 456:NME Express 1992-1998/Jan B2  
 (c) 1998 J.R. Prous, S.A.  
 File 467:ExtraMED(tm) 1996/Dec  
 (c) 1996 Informania Ltd.  
 File 624:McGraw-Hill Publications 1985-1998/Feb 10  
 (c) 1998 McGraw-Hill Co. Inc  
 \*File 624: INDEPENDENT POWER REPORT is now named JN=GLOBAL POWER REPORT  
 File 157:Aidsline(R) 1980-1997/Dec  
 format only 1997 The Dialog Corporation

| Set        | Items        | Description                |
|------------|--------------|----------------------------|
| ---        | -----        | -----                      |
| ? s        | HIV(4w)      | envelope(4w)protein        |
| Processed  | 10 of        | 33 files ...               |
| Processing |              |                            |
| Processed  | 20 of        | 33 files ...               |
| Processing |              |                            |
| Completed  | processing   | all files                  |
|            | 511586       | HIV                        |
|            | 210772       | ENVELOPE                   |
|            | 5226243      | PROTEIN                    |
| S1         | 11758        | HIV(4W)ENVELOPE(4W)PROTEIN |
| ? s        | variable(4w) | region and s1              |
| Processed  | 20 of        | 33 files ...               |
| Processing |              |                            |
| Completed  | processing   | all files                  |
|            | 893571       | VARIABLE                   |
|            | 2379454      | REGION                     |
|            | 32876        | VARIABLE(4W)REGION         |
|            | 11758        | S1                         |
| S2         | 336          | VARIABLE(4W)REGION AND S1  |
| ? s        | s2           | and peptides               |
|            | 336          | S2                         |
|            | 844848       | PEPTIDES                   |
| S3         | 101          | S2 AND PEPTIDES            |
| ? s        | inhibition   | and s3                     |
|            | 1994087      | INHIBITION                 |
|            | 101          | S3                         |
| S4         | 14           | INHIBITION AND S3          |
| ? rd       |              |                            |

>>>Duplicate detection is not supported for File 307.  
 >>>Duplicate detection is not supported for File 337.  
 >>>Duplicate detection is not supported for File 340.

>>>Duplicate detection is not supported for File 348.  
>>>Duplicate detection is not supported for File 351.  
>>>Duplicate detection is not supported for File 375.  
>>>Duplicate detection is not supported for File 456.

>>>Records from unsupported files will be retained in the RD set.  
...completed examining records  
S5 12 RD (unique items)  
? t s5/5/1-12

5/5/1 (Item 1 from file: 5)  
DIALOG(R)File 5:BIOSIS PREVIEWS(R)  
(c) 1998 BIOSIS. All rts. reserv.

11308702 BIOSIS Number: 97508702

Suramin inhibits binding of the V3 region of **HIV-1 envelope glycoprotein** gp120 to galactosylceramide, the receptor for HIV-1 gp120 on human colon epithelial cells

Yahi N; Sabatier J-M; Nickel P; Mabrouk K; Gonzalez-Scarano F; Fantini J  
CNRS URA 1455, Fac. de Med. Nord, Bd Pierre Dramard, 13916 Marseille  
Cedex 20, FRA

Journal of Biological Chemistry 269 (39). 1994. 24349-24353.

Full Journal Title: Journal of Biological Chemistry

ISSN: 0021-9258

Language: ENGLISH

Print Number: Biological Abstracts Vol. 098 Iss. 011 Ref. 144441

The infection of human colonic epithelial cells HT-29 by human immunodeficiency virus type 1 (HIV-1) occurs independently of CD4, the main HIV-1 receptor expressed on lymphocytes and macrophages. Recent studies from our group have shown that HT-29 cells express the glycosphingolipid galactosylceramide (GalCer), a potential alternative receptor for the **HIV-1 envelope glycoprotein** gp120. The binding of recombinant gp120 to GalCer was blocked by monoclonal antibodies directed against the third **variable region** (V3) of gp120, suggesting that the V3 domain was implicated in GalCer recognition. In the present report, we show that suramin, a polysulfonyle naphthylurea known to inhibit retroviral reverse transcriptases in vitro, blocks HIV-1 infection in HT-29 cells. The effect is dose dependent, with a half-maximal **inhibition** (IC-50) achieved for a suramin concentration of 54  $\mu$ -g/ml. Since (3H)suramin was not significantly internalized into HT-29 cells during our infection assay (i.e. 2 h), we have considered the possibility that the drug could act at an extracellular step of the HIV-1 cycle. Using a high performance thin layer chromatography binding assay, we show that suramin inhibits binding of HIV-1 gp120 to purified GalCer with an IC-50 of 25  $\mu$ -g/ml. Suramin does not bind to GalCer, since preincubation of GalCer with suramin did not prevent the subsequent attachment of gp120. Using a solid-phase assay, we show that (3H)suramin specifically binds to recombinant gp120 and that this binding could be blocked by a monoclonal antibody specific for the conserved GPGRF motif of the V3 domain of gp120. We also demonstrate that (3H)suramin binds to multibranched synthetic GPGRF **peptides** that block HIV-1 infection in HT-29 cells. Binding of (3H)suramin to V3 **peptides** is specific and inhibited by unlabeled suramin (IC-50 of 28  $\mu$ -g/ml). In contrast, the suramin derivative NF036, that is unable to block HIV-1 infection in HT-29 cells, does not inhibit the binding of (3H)suramin to V3 **peptides**. Taken together, these results suggest that suramin blocks HIV-1 infection in HT-29 cells because it binds to the V3 domain of gp120 and hence prevents the interaction between gp120 and the GalCer receptor.

Descriptors/Keywords: RESEARCH ARTICLE; HUMAN IMMUNODEFICIENCY VIRUS TYPE 1; SURAMIN; ANTIVIRAL-DRUG; PHARMACODYNAMICS

Concept Codes:

\*02508 Cytology and Cytochemistry-Human  
\*10064 Biochemical Studies-Proteins, Peptides and Amino Acids  
\*10066 Biochemical Studies-Lipids  
\*10068 Biochemical Studies-Carbohydrates

- \*10506 Biophysics-Molecular Properties and Macromolecules
- \*10508 Biophysics-Membrane Phenomena
- \*14006 Digestive System-Pathology
- \*22014 Pharmacology-Digestive System
- \*33506 Virology-Animal Host Viruses
- \*38506 Chemotherapy-Antiviral Agents
- 12512 Pathology, General and Miscellaneous-Therapy (1971- )
- 22005 Pharmacology-Clinical Pharmacology (1972- )
- 36006 Medical and Clinical Microbiology-Virology

Biosystematic Codes:

- 02623 Retroviridae (1993- )
- 86215 Hominidae

Super Taxa:

- Microorganisms; Viruses; Animals; Chordates; Vertebrates; Mammals;
- Primates; Humans

5/5/2 (Item 1 from file: 348)  
 DIALOG(R)File 348:EUROPEAN PATENTS  
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00770349  
 \*\*ORDER fax of complete patent from KR SourceOne. See HELP ORDER348\*\*  
 Methods of producing biologically active peptide dimers  
 Verfahren zur herstellung von biologisch-aktive Dimerpeptiden  
 Procede de preparation de **peptides** dimeres biologiquement actifs  
 PATENT ASSIGNEE:  
 ZymoGenetics, Inc., (627045), 1201 Eastlake Avenue East, Seattle  
 Washington 98102, (US), (applicant designated states:  
 AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL; SE)  
 INVENTOR:  
 Sledziewski, Andrzej Z., 14543-30th Avenue N.E., Weattle, Washington  
 98155, (US)  
 Bell, Lillian A., 7545-12th N.W. Avenue, Seattle, Washington 98117, (US)  
 Kindsvogel, Wayne R., 6014-24th N.W. Avenue, Seattle, Washington 98115,  
 (US)  
 LEGAL REPRESENTATIVE:  
 Grunecker, Kinkeldey, Stockmair & Schwanhausser Anwaltssozietat (100721)  
 , Maximilianstrasse 58, 80538 Munchen, (DE)  
 PATENT (CC, No, Kind, Date): EP 721983 A1 960717 (Basic)  
 APPLICATION (CC, No, Date): EP 95118567 890118;  
 PRIORITY (CC, No, Date): US 146877 880122  
 DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL; SE  
 INTERNATIONAL PATENT CLASS: C12N-015/62; C12N-015/13; C07K-016/46;

ABSTRACT EP 721983 A1  
 Methods for producing secreted biologically active peptide dimers are disclosed. The methods for producing secreted biologically active peptide dimers utilize a DNA sequence encoding a peptide requiring dimerization for biological activity joined to a dimerizing protein. **Polypeptides** comprising essentially the extracellular domain of a human PDGF receptor fused to dimerizing proteins, the portion being capable of binding human PDGF or an isoform thereof, are also disclosed. The **polypeptides** may be used within methods for determining the presence of and for purifying human PDGF or isoforms thereof. Pharmaceutical and diagnostic compositions utilizing the **polypeptides** are also disclosed.  
 ABSTRACT WORD COUNT: 114

LEGAL STATUS (Type, Pub Date, Kind, Text):  
 Application: 960717 A1 Published application (A1with Search Report  
 ;A2without Search Report)  
 Examination: 960717 A1 Date of filing of request for examination:  
 951124  
 LANGUAGE (Publication,Procedural,Application): English; English; English  
 FULLTEXT AVAILABILITY:

| Available Text                     | Language  | Update | Word Count |
|------------------------------------|-----------|--------|------------|
| CLAIMS A                           | (English) | EPAB96 | 1003       |
| SPEC A                             | (English) | EPAB96 | 16097      |
| Total word count - document A      |           |        | 17100      |
| Total word count - document B      |           |        | 0          |
| Total word count - documents A + B |           |        | 17100      |

5/5/3 (Item 2 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
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00555859

\*\*ORDER fax of complete patent from KR SourceOne. See HELP ORDER348\*\*

ANTI CD-4 ANTIBODIES BLOCKING HIV-INDUCED SYNCYTIA  
HIV-INDUZIERTER SYNZYTIEN BLOCKIERENDER ANTI-CD-4-ANTIKORPER  
ANTICORPS ANTI-CD4 BLOQUANT LES SYNCYTIA PROVOQUES PAR LE VIH  
PATENT ASSIGNEE:

BIOGEN, INC., (1049451), 14 Cambridge Center, Cambridge Massachusetts  
02142, (US), (applicant designated states:  
AT;BE;CH;DE;DK;ES;FR;GB;GR;IT;LI;LU;NL;SE)

INVENTOR:

BURKLY, Linda, C., 34 Winthrop Street, West Newton, MA 02165, (US)  
CHISHOLM, Patricia, L., 217 Liberty Street, Quincy, MA 02169, (US)  
THOMAS, David, W., 14 Eisenhower Circle, Wellesley, MA 02181, (US)  
ROSA, Margaret, D., 32 Grove Street, Winchester, MA 01890, (US)  
ROSA, Joseph, J., 32 Grove Street, Winchester, MA 01890, (US)

LEGAL REPRESENTATIVE:

VOSSIUS & PARTNER (100311), Postfach 86 07 67, 81634 Munchen, (DE)  
PATENT (CC, No, Kind, Date): EP 512112 A1 921111 (Basic)  
EP 512112 B1 970528  
WO 9209305 920611

APPLICATION (CC, No, Date): EP 92903295 911127; WO 91US8843 911127

PRIORITY (CC, No, Date): US 618542 901127

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; NL; SE

INTERNATIONAL PATENT CLASS: A61K-039/395; C12P-021/08;

CITED PATENTS (WO A): WO 9004978 A; WO 8909782 A

CITED REFERENCES (WO A):

J. Exp. Med., Vol. 172, October 1990 Franco Celada et al.: "Antibody  
raised against soluble CD4-rgp120 complex recognizes the CD4 moiety and  
blocks membrane fusion without inhibiting CD4-gp120 binding ",  
J. Exp. Med., Vol. 172, October 1990 D. Healey et al.: "Novel anti-CD4  
monoclonal antibodies separate human immunodeficiency virus infection  
and fusion of CD4+ cells from virus binding ",  
Immunology, Vol. 71, 1990 D. Wilks et al.: "Differences in affinity of  
anti-CD4 monoclonal antibodies predict their effects on syncytium  
induction by human immunodeficiency virus ",  
Biochimica et Biophysica Acta, Vol. 989, 1989 T. Kieber-Emmons et al.:  
"The gp120-CD4 interface: structural, immunological and pathological  
considerations ",  
Journal of Virology, Vol. 62, No. 11, November 1988 Michael A. Skinner et  
al.: "Neutralizing antibodies to an immunodominant envelope sequence do  
not prevent gp120 binding to CD4 ",  
Cell, Vol. 60, March 1990 David Camerini et al.: "A CD4 domain important  
for HIV-mediated syncytium formation lies outside the virus binding  
site ",  
The Journal of Biological Chemistry, Vol. 266, No. 9, March 1991  
Alemseged Truneh et al.: "A region in domain 1 of CD4 distinct from  
the primary gp120 binding site is involved in HIV infection and  
virus-mediated fusion ",;

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 921111 A1 Published application (A1with Search Report  
;A2without Search Report)  
Examination: 921111 A1 Date of filing of request for examination:  
920819  
Examination: 941214 A1 Date of despatch of first examination report:

Grant: 970528 B1 Granted patent  
 LANGUAGE (Publication,Procedural,Application): English; English; English  
 FULLTEXT AVAILABILITY:  

| Available Text                     | Language  | Update | Word Count |
|------------------------------------|-----------|--------|------------|
| CLAIMS B                           | (English) | EPAB97 | 3921       |
| CLAIMS B                           | (German)  | EPAB97 | 3434       |
| CLAIMS B                           | (French)  | EPAB97 | 4262       |
| SPEC B                             | (English) | EPAB97 | 25205      |
| Total word count - document A      |           |        | 0          |
| Total word count - document B      |           |        | 36822      |
| Total word count - documents A + B |           |        | 36822      |

5/5/4 (Item 3 from file: 348)  
 DIALOG(R)File 348:EUROPEAN PATENTS  
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00552214

\*\*ORDER fax of complete patent from KR SourceOne. See HELP ORDER348\*\*

Novel anti-HIV antibodies.

Antikörper gegen H.I.V.

Anticorps contre V.I.H.

PATENT ASSIGNEE:

CIBA-GEIGY AG, (201300), Klybeckstrasse 141, CH-4002 Basel, (CH),  
 (applicant designated states:  
 AT;BE;CH;DE;DK;ES;FR;GB;GR;IT;LI;LU;NL;PT;SE)

INVENTOR:

Mestan, Jorgen, Dr., Drosselweg 8, W-7819 Denzlingen, (DE)  
 Lazdins, Janis K., Dr., Martinsgasse 13, CH-4051 Basle, (CH)  
 Woods-Cook, Kathie A., Maulbeerstrasse 65, CH-4058 Basle, (CH)  
 Hardman, Norman, Dr., Gstaltnrainweg 67/3, CH-4125 Riehen, (CH)  
 Hochkeppel, Heinz-Kurt, Dr., Traugott Meyer-Strasse 1, CH-4147 Aesch,  
 (CH)

PATENT (CC, No, Kind, Date): EP 519866 A1 921223 (Basic)

APPLICATION (CC, No, Date): EP 92810445 920610;

PRIORITY (CC, No, Date): EP 91810468 910618

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; NL; PT;  
 SE

INTERNATIONAL PATENT CLASS: C12N-015/13; C12P-021/08; C12N-015/63;  
 C12N-005/10; C12N-005/20; A61K-039/42; G01N-033/569; G01N-033/577;

CITED PATENTS (EP A): WO 9107494 A; WO 9107493 A; WO 8904376 A; EP 345461 A  
 ; US 4843011 A; US 4843011 A

CITED REFERENCES (EP A):

NATURE. vol. 332, 24 March 1988, LONDON GB pages 323 - 327; L. RIECHMANN  
 ET AL.: 'Reshaping human antibodies for therapy.';

ABSTRACT EP 519866 A1

The invention concerns monoclonal antibodies and antibody derivatives directed against HIV core protein p24 which recognize p24 expressed on the surface of HIV-infected macrophages and/or kill HIV-infected cells. The monoclonal antibodies of the invention may be murine antibodies or chimeric antibodies consisting of human constant regions and murine variable or hypervariable regions. Methods of manufacture of such antibodies, hybridoma or transfectoma cell lines secreting them and methods for production of the hybridoma or transfectoma cell lines are also encompassed by this invention. The invention further concerns recombinant DNA comprising an insert coding for the variable regions of antibodies against HIV core protein p24 having the mentioned properties, methods of manufacture of such recombinant DNAs, and host cells transformed with such recombinant DNAs.

The antibodies are especially useful for the prevention of the progression of AIDS and for the treatment of AMS, but can also be used for the diagnosis of HIV infection in an immunoassay.

ABSTRACT WORD COUNT: 157

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 921223 A1 Published application (A1with Search Report  
;A2without Search Report)

Withdrawal: 940622 A1 Date on which the European patent application  
was deemed to be withdrawn: 930624

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

| Available Text                     | Language  | Update | Word Count |
|------------------------------------|-----------|--------|------------|
| CLAIMS A                           | (English) | EPABF1 | 2394       |
| SPEC A                             | (English) | EPABF1 | 22827      |
| Total word count - document A      |           |        | 25221      |
| Total word count - document B      |           |        | 0          |
| Total word count - documents A + B |           |        | 25221      |

5/5/5 (Item 4 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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00418264

\*\*ORDER fax of complete patent from KR SourceOne. See HELP ORDER348\*\*

Non-human primate CD4 **polypeptides** and human CD4 molecules capable of  
being glycosylated

Nichtmenschliche primaten CD4-Polypeptide und menschliche glykosilierbare  
CD4-Molekule

**Polypeptides** CD4 de primates non humains et molecules CD4 humaines  
susceptibles d'etre glycosylees

PATENT ASSIGNEE:

THE GENERAL HOSPITAL CORPORATION, (370400), 55 Fruit Street, Boston, MA  
02114, (US), (applicant designated states:  
AT;BE;CH;DE;DK;ES;FR;GB;GR;IT;LI;LU;NL;SE)

INVENTOR:

Seed, Brian, Molecular Biology, Wellman 9, Boston, MA 02114, (US)

Camerini, David, 1520 Rodney Drive, Apt. 203, Los Angeles, CA 90027, (US)

LEGAL REPRESENTATIVE:

Fischer, Hans-Jurgen, Dr. et al (70771), Hoechst AG Patent- und  
Lizenzabteilung Gebaude K 801, 65926 Frankfurt am Main, (DE)

PATENT (CC, No, Kind, Date): EP 414178 A2 910227 (Basic)

EP 414178 A3 911113

EP 414178 B1 961204

APPLICATION (CC, No, Date): EP 90115877 900818;

PRIORITY (CC, No, Date): US 397782 890823

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; NL; SE

INTERNATIONAL PATENT CLASS: C12N-015/12; C12N-015/62; C12N-015/13;

C12P-021/02; C12Q-001/70; A61K-038/00; G01N-033/569;

CITED PATENTS (EP A): EP 314317 A; WO 8801304 A

CITED REFERENCES (EP A):

CELL, vol. 42, August 1985, pages 93-104; P.J. MADDON et al.: "The  
isolation and nucleotide sequence of a cDNA encoding the T cell surface  
protein T4: A new member of the immunoglobulin gene family"

NATURE, vol. 331, no. 6151, 7th January 1988, pages 78-81; R.E. HUSSEY et  
al.: "A soluble CD4 protein selectively inhibits HIV replication and  
syncytium formation"

NATURE, vol. 331, no. 6151, 7th January 1988, pages 84-86; A. TRAUNECKER  
et al.: "Soluble CD4 molecules neutralize human immunodeficiency virus  
type 1"

NATURE, vol. 331, no. 6151, 7th January 1988, pages 82-84; K.C. DEEN et  
al.: "A soluble form of CD4 (T4) protein inhibits AIDS virus infection"

NATURE, vol. 331, no. 6151, 7th January 1988, pages 76-78; R.A. FISHER et  
al.: "HIV infection is blocked in vitro by recombinant soluble CD4";

ABSTRACT EP 414178 A2

The invention relates to substantially pure non-human primate CD4, and  
fragments thereof which bind to HIV or SIV gp120. The invention also  
relates to gp120 binding molecules related to human CD4 but which may  
exist in glycosylated form.



The invention also relates to fusion proteins which comprise the CD4 molecules of the invention, or fragments thereof, and an immunoglobulin light or heavy chain, wherein the **variable region** of the light or heavy chain has been replaced with CD4 or fragment thereof which is capable of binding to gp120. The invention also relates to fusion proteins comprising the CD4 molecules of the invention and a cytotoxic polypeptide.

The invention also relates to an immunoglobulin-like molecules comprising the fusion proteins of the invention together with an immunoglobulin light or heavy chain.

The invention also relates to methods of treating HIV or SIV infection comprising administering the CD4 molecules of the invention, glycoproteins, fragments thereof, fusion proteins or immunoglobulin-like molecules of the invention to an animal.

The invention also relates to assays for HIV or SIV comprising contacting a sample suspected of containing HIV or SIV gp120 with the CD4 molecules of the invention, fragments thereof, glycoproteins, immunoglobulin-like molecules, or fusion proteins of the invention, and detecting whether a complex is formed.

The invention also relates to nucleic acid molecules which specify the proteins, glycoproteins and fusion proteins of the invention as well as vectors and transformed hosts.

ABSTRACT WORD COUNT: 303

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 910227 A2 Published application (A1with Search Report  
;A2without Search Report)  
Examination: 910227 A2 Date of filing of request for examination:  
901221  
Search Report: 911113 A3 Separate publication of the European or  
International search report  
Change: 920603 A2 Representative (change)  
Examination: 930922 A2 Date of despatch of first examination report:  
930811  
Grant: 961204 B1 Granted patent  
Oppn None: 971126 B1 No opposition filed

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

| Available Text                     | Language  | Update | Word Count |
|------------------------------------|-----------|--------|------------|
| CLAIMS A                           | (English) | EPABF1 | 1870       |
| CLAIMS B                           | (English) | EPAB96 | 1683       |
| CLAIMS B                           | (German)  | EPAB96 | 1723       |
| CLAIMS B                           | (French)  | EPAB96 | 1898       |
| SPEC A                             | (English) | EPABF1 | 10862      |
| SPEC B                             | (English) | EPAB96 | 10386      |
| Total word count - document A      |           |        | 12733      |
| Total word count - document B      |           |        | 15690      |
| Total word count - documents A + B |           |        | 28423      |

5/5/6 (Item 5 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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00335245

\*\*ORDER fax of complete patent from KR SourceOne. See HELP ORDER348\*\*

Methods of producing secreted receptor analogs

Verfahren zur Herstellung von sekretierten Rezeptoranalogen

Procede de preparation d'analogues de recepteurs secretes

PATENT ASSIGNEE:

ZymoGenetics, Inc., (627045), 1201 Eastlake Avenue East, Seattle  
Washington 98102, (US), (applicant designated states:  
AT;BE;CH;DE;ES;FR;GB;GR;IT;LI;LU;NL;SE)

INVENTOR:

Sledziewski, Andrzej Z., 14543-30th Avenue N.E., Seattle Washington 98155  
, (US)

Bell, Lillian A., 7545-12th N.W. Avenue, Seattle Washington 98117, (US)  
Kindsvogel, Wayne R., 6014-24th Avenue N.E., Seattle Washington 98115,  
(US)

LEGAL REPRESENTATIVE:

Grunecker, Kinkeldey, Stockmair & Schwanhausser Anwaltssozietat (100721)  
, Maximilianstrasse 58, 80538 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 325224 A2 890726 (Basic)  
EP 325224 A3 910417  
EP 325224 B1 960731

APPLICATION (CC, No, Date): EP 89100787 890118;

PRIORITY (CC, No, Date): US 146877 880122

DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL; SE

INTERNATIONAL PATENT CLASS: C12N-015/12; C12P-021/00; G01N-033/68;

A61K-038/17;

CITED PATENTS (EP A): EP 244221 A; EP 173494 A; EP 327369 A

CITED REFERENCES (EP A):

PROC. NATL. ACAD. SCI. vol. 84, May 1987,  
pages 2936-2940, Washington, DC, US; N.R.J. GASCOIGNE et al.:  
"Secretion of a chimeric T-cell receptor-immunoglobulin protein"  
PROTEIN ENGINEERING vol. 1, no. 3, June  
1987, page 237, Oxford, GB; H. RIEDEL et al.: "Receptor chimeras: a new  
approach to study mitogenic and oncogenic transmembrane signalling"  
NATURE vol. 323, 18 September  
1986, pages 226-232, London, GB; Y. YARDEN et al.: "Structure of the  
receptor for platelet-derived growth factor helps define a family of  
closely related growth factor receptors"  
BIOLOGICAL ABSTRACTS DATABASE abstract no. 86076857;  
L. CLAESON-WELSH et al.: "Complementary DNA cloning and expression of  
a human platelet-derived growth factor PDGF receptor specific for  
B-chain-containing PDGF molecules" & Mol. Cell. Biol. 1988, vol. 8, no.  
8, pages 3476-3486  
PROC. NATL. ACAD. SCI. vol. 85, May 1988,  
pages 3435-3439, Washington, DC, US; R.G.K. GRONWALD et al.: "Cloning  
and expression of a cDNA coding for the human platelet-derived growth  
factor receptor: Evidence for more than one receptor class"  
CHEMICAL ABSTRACTS vol. 110, no. 23, 5  
June 1989, abstract no. 210567f, Columbus, Ohio, US; R.A. MARIUZZA et  
al.: "Secretion of a homodimeric VaCkT-cell receptor-immunoglobulin  
chimeric protein" & J. Biol. Chem. 1989, vol. 264, no. 13, pages  
7310-7316  
BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS  
vol. 149, no. 3, 31 December 1987, pages 960-968, NY, US; Y. KUWANA et  
al.: "Expression of chimeric receptor composed of  
immunoglobulin-derived V resions and T-cell receptor-derived C regions"  
;

ABSTRACT EP 325224 A2

Methods for producing a secreted receptor analogs and biologically  
active peptide dimers are disclosed. The methods for producing secreted  
receptor analogs and biologically active peptide dimers utilize a DNA  
sequence encoding a receptor analog or a peptide requiring dimerization  
for biological activity joined to a dimerizing protein. The receptor  
analog includes a ligand-binding domain. **Polypeptides** comprising  
essentially the extracellular domain of a human PDGF receptor fused to  
dimerizing proteins, the portion being capable of binding human PDGF or  
an isoform thereof, are also disclosed. The **polypeptides** may be  
used within methods for determining the presence of and for purifying  
human PDGF or isoforms thereof. Pharmaceutical and diagnostic  
compositions utilizing the **polypeptides** are also disclosed.

ABSTRACT WORD COUNT: 118

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 890726 A2 Published application (Alwith Search Report  
;A2without Search Report)

Search Report: 910417 A3 Separate publication of the European or  
International search report

Examination: 911023 A2 Date of filing of request for examination:  
910826

\*Assignee: 920108 A2 Applicant (transfer of rights) (change):  
ZYMOGENETICS, INC. (627043) 4225 Roosevelt Way  
N.E. Seattle, WA 98108 (US) (applicant  
designated states:  
AT;BE;CH;DE;ES;FR;GB;GR;IT;LI;LU;NL;SE)

Examination: 921021 A2 Date of despatch of first examination report:  
920904

Change: 940119 A2 Representative (change)

\*Assignee: 940928 A2 Applicant (transfer of rights) (change):  
ZYMOGENETICS, INC. (627045) 1201 Eastlake  
Avenue East Seattle Washington 98102 (US)  
(applicant designated states:  
AT;BE;CH;DE;ES;FR;GB;GR;IT;LI;LU;NL;SE)

Grant: 960731 B1 Granted patent

Oppn None: 970723 B1 No opposition filed

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

| Available Text                     | Language  | Update | Word Count |
|------------------------------------|-----------|--------|------------|
| CLAIMS B                           | (English) | EPAB96 | 2754       |
| CLAIMS B                           | (German)  | EPAB96 | 2703       |
| CLAIMS B                           | (French)  | EPAB96 | 3302       |
| SPEC B                             | (English) | EPAB96 | 15252      |
| Total word count - document A      |           |        | 0          |
| Total word count - document B      |           |        | 24011      |
| Total word count - documents A + B |           |        | 24011      |

5/5/7 (Item 6 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 1998 EUROPEAN PATENT OFFICE. All rts. reserv.

00333274

\*\*ORDER fax of complete patent from KR SourceOne. See HELP ORDER348\*\*  
DNA SEQUENCES, RECOMBINANT DNA MOLECULES AND PROCESSES FOR PRODUCING  
SOLUBLE T4 PROTEINS.  
DNS-SEQUENZEN, REKOMBINANT-DNS-MOLEKULE UND VERFAHREN ZUR HERSTELLUNG  
LOSLICHER T4-PROTEINE.  
SEQUENCES D'ADN, MOLECULES D'ADN RECOMBINANT ET PROCEDES DE PRODUCTION DE  
PROTEINES T4 SOLUBLES.

PATENT ASSIGNEE:

BIOGEN, INC., (1049451), 14 Cambridge Center, Cambridge Massachusetts  
02142, (US), (applicant designated states:  
AT;BE;CH;DE;FR;GB;IT;LI;LU;NL;SE)

INVENTOR:

FISHER, Richard, A., 1079 Beacon Street, Brookline, MA 02146, (US)  
GILBERT, Walter, 15 Gray Gardens West, Cambridge, MA 02138, (US)  
SATO, Vicki, L., 43 Larch Road, Cambridge, MA 02138, (US)  
FLAVELL, Richard, A., 182 Reservoir Road, Killingworth, CT 06417, (US)  
MARAGANORE, John, M., 84 Patrick Road, Tewksbury, MA 01876, (US)  
LIU, Theresa, R., 102 Emerson Road, Milton, MA 02186, (US)

LEGAL REPRESENTATIVE:

Bannerman, David Gardner et al (28001), Withers & Rogers 4 Dyer's  
Buildings Holborn, London, EC1N 2JT, (GB)

PATENT (CC, No, Kind, Date): EP 347435 A1 891227 (Basic)  
EP 347435 A1 911121  
WO 8901940 890309

APPLICATION (CC, No, Date): EP 88908543 880901; WO 88US2940 880901

PRIORITY (CC, No, Date): US 94322 870904; US 141649 880107

DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE

INTERNATIONAL PATENT CLASS: C07H-015/12; C12Q-001/70; C12Q-001/02;  
C12Q-001/06; C12P-021/00; C12P-019/34; C12P-001/04; C12N-015/00;  
C12N-007/00; C07K-013/00;

CITED PATENTS (EP A): WO 8801304 A; WO 8901779 A; WO 8902922 A

CITED REFERENCES (EP A):

See also references of WO8901940;

CITED REFERENCES (WO A):

- Science, Vol. 234, issued 1986 November, (Washington, D.C., U.S.A.), (Q.J. SATTENTAU et al), "Epitopes of the CD4 Antigen and HIV Infection" see pages 1120-1123. see particularly page 1120
- Science, Vol. 234, issued 1986, November, (Washington, D.C. U.S.A) (J.A. HOXIE et al), "Alterations in T4 (CD4) Protein and mRNA Synthesis in Cells Infected with HIV" see pages 1123-1127. see particularly page 1123
- Proceedings National Academy of Sciences, U.S.A., Volume 84, issued 1987 December (Washington, D.C. U.S.A), (P.J.MADDON et al.), "Structure and Expression of the Human and Mouse T4 Genes", see pages 9155-9159, see particularly page 9155 and 9156.
- Proceedings National Academy of Sciences, U.S.A., Volume 84, issued 1987 December (Washington, D.C. U.S.A), (P.J.MADDON et al.), "Structure and Expression of the Human and Mouse T4 Genes", see pages 9155-9159, see Particularly page 9155 and 9156.
- Proceedings National Academy of Sciences, U.S.A., Volume 84, issued 1987, June (Washington, D.C. U.S.A.), (T.C. CHANH et al.), "Monoclonal Anti-Idiotypic Antibody Mimics the CD4 Receptor and Binds Human Immunodeficiency Virus" see pages 3891-3895. see particularly page 3891.
- Cell, Volume 47, issued 1986, November, (Cambridge, Mass., U.S.A.) (P.J. MADDON et al), "The T4 Gene Encodes the Aids Virus Receptor and is Expressed in the Immune System and the Brain", see pages 333-348, see particularly pages 333-335.

IDEM

- CHEMICAL ABSTRACTS, Volume 107, No. 15, issued 1987 October 12 (Columbus, Ohio, U.S.A.), T.L. LENTZ et al, "Rabies Virus Binding to Cellular Membranes Measured by Enzyme Immunoassay" see page 359, column 1, the Abstract No. 131853f, Muscle Nerve, 1985, 8(4), 336-345 (Eng).
- CHEMICAL ABSTRACTS, Volume 106, No. 21, issued 1987, May 25, (Columbus, Ohio, U.S.A), J.P.ZIMMER et al., "Diphenylhydantoin (DPH) Blocks HIV-Receptor on T-Lymphocyte Surface", see page 123, column 1, the Abstract No. 168522c, Blut, 1986, 53(6), 447-450 (Eng).
- Biological Abstracts, Volume 85, No. 4, issued 1988, April 15 (Philadelphia, PA, U.S.A), A.G. DALGLEISH et al., 'Neutralization of HIV Isolates by Anti-Idiotypic Antibodies which Mimic the T4 (CD4) Epitope: A Potential Aids Vaccine' see page 222, Abstracts No. 37595, Lancet 2 (8567): 1047-1050 (Eng).;

ABSTRACT EP 347435 A1

This invention relates to DNA sequences, recombinant DNA molecules and processes for producing soluble T4 protein. More particularly, this invention relates to DNA sequences that are characterized in that they code on expression in an appropriate unicellular host for soluble forms of T4, the receptor on the surface of T4(sup +) lymphocytes, or derivatives thereof. In accordance with this invention, the DNA sequences, recombinant DNA molecules and processes of this invention may be employed to produce soluble T4 essentially free of other proteins of human origin. This soluble protein may then advantageously be used in the immunotherapeutic and diagnostic compositions and methods of this invention. The soluble T4-based immunotherapeutic compositions and methods of this invention are useful in treating immunodeficient patients suffering from diseases caused by infective agents whose primary targets are T4(sup +) lymphocytes. According to a preferred embodiment, this invention relates to soluble T4-based compositions and methods which are useful in preventing, treating or detecting acquired immune deficiency syndrome, AIDS related complex and HIV infection.

ABSTRACT WORD COUNT: 171

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 891227 A1 Published application (A1with Search Report  
;A2without Search Report)

Examination: 891227 A1 Date of filing of request for examination:  
890420

Change: 900207 A1 Inventor (change)  
Search Report: 911121 A1 Drawing up of a supplementary European search  
report: 910930  
Examination: 920408 A1 Date of despatch of first examination report:  
920217  
Withdrawal: 941207 A1 Date on which the European patent application  
was deemed to be withdrawn: 930108

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

| Available Text                     | Language  | Update | Word Count |
|------------------------------------|-----------|--------|------------|
| CLAIMS A                           | (English) | EPABF1 | 2307       |
| SPEC A                             | (English) | EPABF1 | 23120      |
| Total word count - document A      |           |        | 25427      |
| Total word count - document B      |           |        | 0          |
| Total word count - documents A + B |           |        | 25427      |

5/5/8 (Item 7 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 1998 EUROPEAN PATENT OFFICE. All rts. reserv.

00332035

\*\*ORDER fax of complete patent from KR SourceOne. See HELP ORDER348\*\*

MONOCLONAL ANTIBODIES NEUTRALIZING HIV-1.

HIV-1 NEUTRALISIERENDE MONOKLONALE ANTIKORPER.

ANTICORPS MONOCLONAUX NEUTRALISANT LE HIV-1.

PATENT ASSIGNEE:

TANOX BIOSYSTEMS, INC., (1023240), 10301 Stella Link Rd., Houston, TX  
77025, (US), (applicant designated states:  
AT;BE;CH;DE;FR;GB;IT;LI;LU;NL;SE)

BAYLOR COLLEGE OF MEDICINE, (401892), 1200 Moursund Avenue, Houston, TX  
77030, (US), (applicant designated states:  
AT;BE;CH;DE;FR;GB;IT;LI;LU;NL;SE)

INVENTOR:

CHANG, Tse, Wen, 3323 Robinhood, Houston, TX 77005, (US)  
FUNG, Sek, C., 3511 Deal, Houston, TX 77025, (US)  
SUN, Cecily, Rou-Yun, 3103 Nottingham Boulevard, Houston, TX 77005, (US)  
SUN, Bill, Nai-Chau, 3103 Nottingham Boulevard, Houston, TX 77005, (US)  
CHANG, Nancy, T., 3323 Robinhood, Houston, TX 77005, (US)  
LIOU, Ruey, Shyan, 1814 Riverbend Crossing, Sugarland, TX 77478, (US)  
ROSEN, Edward, M., 2207 South Braeswood Boulevard, Houston, TX 77030,  
(US)

LEGAL REPRESENTATIVE:

VOSSIUS & PARTNER (100311), Postfach 86 07 67, D-81634 Munchen, (DE)  
PATENT (CC, No, Kind, Date): EP 366718 A1 900509 (Basic)  
EP 366718 B1 950510  
WO 8809181 881201

APPLICATION (CC, No, Date): EP 88906589 880527; WO 88US1797 880527

PRIORITY (CC, No, Date): US 57445 870529; US 137861 871224; US 197766  
880523

DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE

INTERNATIONAL PATENT CLASS: A61K-039/395; C12P-021/08;

CITED REFERENCES (EP A):

See also references of WO8809181;

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 900509 A1 Published application (A1with Search Report  
;A2without Search Report)

Examination: 900509 A1 Date of filing of request for examination:  
891127

Change: 900905 A1 Representative (change)

Examination: 920930 A1 Date of despatch of first examination report:  
920817

Change: 931222 A1 Representative (change)

Grant: 950510 B1 Granted patent

Oppn None: 960501 B1 No opposition filed

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

| Available Text                     | Language  | Update | Word Count |
|------------------------------------|-----------|--------|------------|
| CLAIMS B                           | (English) | EPAB95 | 169        |
| CLAIMS B                           | (German)  | EPAB95 | 163        |
| CLAIMS B                           | (French)  | EPAB95 | 182        |
| SPEC B                             | (English) | EPAB95 | 17442      |
| Total word count - document A      |           |        | 0          |
| Total word count - document B      |           |        | 17956      |
| Total word count - documents A + B |           |        | 17956      |

5/5/9 (Item 8 from file: 348)  
 DIALOG(R)File 348:EUROPEAN PATENTS  
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00310586

\*\*ORDER fax of complete patent from KR SourceOne. See HELP ORDER348\*\*

Novel vaccines.

Impfstoff.

Vaccin.

PATENT ASSIGNEE:

HIVER LIMITED, (958250), 13 Southampton Place, London WC1A 2AJ, (GB),  
 (applicant designated states: AT;BE;CH;DE;ES;FR;GB;GR;IT;LI;LU;NL;SE)

INVENTOR:

Dalglish, Angus George, 18 Lindfield Road, London W5 1QR, (GB)  
 Beverley, Peter Charles Leonard, 111 Castlehaven Road, London NW1 8SJ,  
 (GB)  
 Sattentau, Quentin James, 5 Painsthorpe Road, Stoke Newington, London N16  
 ORB, (GB)  
 Kennedy, Ronald Curtis, 2707 Indian Ridge Drive, San Antonio, Texas 78231  
 , (US)  
 Chanh, Tran Cong, 14814 Personality, San Antonio, Texas 78248, (US)

LEGAL REPRESENTATIVE:

Ablewhite, Alan James et al (27521), MARKS & CLERK 57/60 Lincoln's Inn  
 Fields, London WC2A 3LS, (GB)

PATENT (CC, No, Kind, Date): EP 287226 A1 881019 (Basic)

APPLICATION (CC, No, Date): EP 88302566 880323;

PRIORITY (CC, No, Date): GB 8706836 870323; US 44716 870501; GB 8712829  
 870601; GB 8716632 870715; GB 8725519 871030

DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL; SE

INTERNATIONAL PATENT CLASS: A61K-039/21; A61K-039/395; A61K-039/42;

G01N-033/569

CITED REFERENCES (EP A):

SCIENCE, Research News, vol. 233, 12th September 1986, pages 1149-1153;  
 D.M. BARNES: "Strategies for an AIDS vaccine"  
 FEDERATION PROCEEDINGS, vol. 46, no. 4, 5th March 1987, page 1352, no.  
 6040; E.M. ZHOU et al.: "Mouse monoclonal anti-anti.cd4, antibodies  
 recognize human immunodeficiency virus antigens"  
 FEDERATION PROCEEDINGS, vol. 46, no. 4, 5th March 1987, page 1352, no.  
 6041; T.C. CHANH et al.: "Anti-idiotypic antibodies against OKT4A bind  
 to human immunodeficiency virus"  
 BIOLOGICAL ABSTRACTS, vol. 84, 1987, ref. no. 78240, no. 78239,  
 Philadelphia, P.A., US; D.S. LUDWIG et al.: "Anti-receptor antibodies  
 designed to elicit 'internal image'-bearing anti-idiotypes: A possible  
 AIDS vaccine" & MED HYPOTHESES 23(3): 303-308. 1987.  
 PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES USA, vol. 84, June 1987,  
 pages 3891-3895; T.C. CHANH et al.: "Monoclonal anti-idiotypic antibody  
 mimics the CD4 receptor and binds human immunodeficiency virus"  
 THE LANCET, vol. II, no. 8567, 7th November 1987, pages 1047-1050,  
 London, GB; A.G. DALGLEISH et al.: "Neutralisation of hiv isolates by  
 anti-idiotypic antibodies which mimic the T4(CD4) epitope: A potential  
 AIDS vaccine"  
 THE JOURNAL OF IMMUNOLOGY, vol. 139, no. 9, 1st November 1987, pages  
 2950-2956, The American Association of Immunologists, US; E.-M. ZHOU et  
 al.: "Immune response to human immunodeficiency virus in vivo  
 administration of anti-idiotypic induces an anti-gp160 response specific

for a synthetic peptide"

THE JOURNAL OF IMMUNOLOGY, vol. 137, no. 9, 1st November 1986, pages 2937-2944, The American Association of Immunologists, US; J.S.

McDOUGAL: "Binding of the human retrovirus HTLV-III/LAV/ARV/HIV to the CD4(T4) molecule: conformation dependence, epitope mapping, antibody inhibition, and potential for idiotypic mimicry"

SCIENCE, vol. 231, 28th March 1986, pages 1556-1559; R.C. KENNEDY et al.: "Antiserum to a synthetic peptide recognizes the HTLV-III envelope glycoprotein";

ABSTRACT EP 287226 A1

The present invention relates to vaccines against AIDS-like viruses comprising antibodies and their equivalents specific for such viruses or cellular receptors therefor, and to methods of treatment and prophylaxis using such vaccines.

ABSTRACT WORD COUNT: 36

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 881019 A1 Published application (A1with Search Report  
;A2without Search Report)  
Examination: 890503 A1 Date of filing of request for examination:  
890307  
Examination: 910814 A1 Date of despatch of first examination report:  
910627  
Withdrawal: 930602 A1 Date on which the European patent application  
was deemed to be withdrawn: 921105

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

| Available Text                     | Language  | Update | Word Count |
|------------------------------------|-----------|--------|------------|
| CLAIMS A                           | (English) | EPABF1 | 231        |
| SPEC A                             | (English) | EPABF1 | 12491      |
| Total word count - document A      |           |        | 12722      |
| Total word count - document B      |           |        | 0          |
| Total word count - documents A + B |           |        | 12722      |

5/5/10 (Item 9 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS

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00309467

\*\*ORDER fax of complete patent from KR SourceOne. See HELP ORDER348\*\*

Methods and compositions for the use of HIV env **polypeptides** and antibodies thereto

Verfahren und Zubereitungen für die Verwendung von HIV-env-Polypeptiden und Antikörpern

Methodes et compositions pour l'utilisation de **polypeptides** env et anticorps anti-env de HIV

PATENT ASSIGNEE:

GENENTECH, INC., (210480), 460 Point San Bruno Boulevard, South San Francisco California 94080, (US), (applicant designated states:

AT;BE;CH;DE;ES;FR;GB;GR;IT;LI;LU;NL;SE)

INVENTOR:

Berman, Phillip W., 1739 Lexington Avenue, San Mateo, CA 94402, (US)

Gregory, Timothy J., 414 Pinehill Road, Hillsborough, CA 94010, (US)

Lasky, Lawrence A., Star Route Box 40, Sausalito, CA 94965, (US)

Nakamura, Gerald R., 1923, 29th Avenue, San Francisco, CA 94116, (US)

Patzer, Eric J., 470 Tahos Road, Orinda, CA 94563, (US)

Patton, John S., 330 Emerald Avenue, San Carlos, CA 94070, (US)

Vitetta, Ellen S., 6914 Pemberton Drive, Dallas, TX 75230, (US)

LEGAL REPRESENTATIVE:

Stuart, Ian Alexander et al (50492), MEWBURN ELLIS York House 23 Kingsway, London WC2B 6HP, (GB)

PATENT (CC, No, Kind, Date): EP 279688 A2 880824 (Basic)  
EP 279688 A3 890913  
EP 279688 B1 970416

APPLICATION (CC, No, Date): EP 88301425 880219;  
PRIORITY (CC, No, Date): US 16809 870220; US 57061 870601; US 155336 880212  
DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL; SE  
INTERNATIONAL PATENT CLASS: A61K-038/00; A61K-039/21; C12P-021/00;  
A61K-047/00;

CITED PATENTS (EP A): WO 8602383 A; EP 187041 A; EP 273716 A

CITED REFERENCES (EP A):

CELL, vol. 41, 1985, pages 653-654; E.S. VITETTA et al.: "Immunotoxins: Redirecting nature's poisons"  
CANCER RESEARCH, vol. 46, July 1986, pages 3295-3298; M. KR\NKE et al.: "Selective killing of human T-lymphotropic virus-I infected leukemic T-cells by monoclonal anti-interleukin 2 receptor antibody-ricin a chain conjugates: Potentiation by ammonium chloride and monensin"  
SCIENCE, vol. 231, 1986, pages 382-385; J.S. McDOUGAL et al.: "Binding of HTLV-III/LAV to T4+ T Cells by a complex of the 110K viral protein and the T4 molecule"  
BIOLOGICAL ABSTRACTS, vol. 80, 1985, abstract no. 51314, Biological Abstracts, Inc., Philadelphia, PA, US; A.H. FILIPOVICH et al.: "Graft-vs.-host disease prophylaxis with anti-T-cell monoclonal antibody OKT3, prednisone and methotrexate in allogeneic bone-marrow transplantation", & BR J HAEMATOL. 60(1): 143-152 1985  
CHEMICAL ABSTRACTS, vol. 105, no. 21, 24th November 1986, page 563, abstract no. 189109t, Columbus, Ohio, US; D.A. WEIGENT et al.: "The HTLV-III envelope protein contains a hexapeptide homologous to a region of interleukin-2 that binds to the interleukin-2 receptor", & BIOCHEM. BIOPHYS. RES. COMMUN. 1986, 139(1), 367-74  
SCIENCE, vol. 233, 12th September 1986, pages 1149-1153; D.M. BARNES: "Strategies for an AIDS vaccine"  
PROCEEDINGS NATIONAL ACADEMY OF SCIENCES, vol. 83, September 1986, pages 7023-7027, US; W.G. ROBEY: "Prospect for prevention of human immunodeficiency virus infection: Purified 120-kDa envelope glycoprotein induces neutralizing antibody";

ABSTRACT EP 279688 A2

The Human Immunodeficiency Virus envelope protein or its fragments that are capable of binding to the T4 helper lymphocyte receptor are used in therapeutically effective doses for the treatment of immunoinflammatory disorders or diseases. Amino acid residues that constitute an essential portion of the T4 receptor binding domain of HIV env fall within a 64 residue sequence extending about from residues 411 to 454 of the 3B isolate. This domain is useful as a vaccine component, or for cytotoxic T cell targeting when conjugated with a target cell binding substance. HIV env which is devoid of a functional T4 receptor binding domain is useful as a vaccine for immunization against HIV infection. Antibodies capable of binding this domain also are provided for therapeutic and diagnostic use. An immunotoxin comprising a monoclonal antibody to a virally encoded cell surface antigen, linked to a toxin such as ricin A chain, is disclosed. Also, a method of killing virally infected cells such as HIV infected cells, comprising administering to the infected cells a therapeutically effective amount of the immunotoxin is disclosed.

ABSTRACT WORD COUNT: 182

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 880824 A2 Published application (A1with Search Report ;A2without Search Report)  
Change: 890823 A2 Obligatory supplementary classification (change)  
Change: 890830 A2 Obligatory supplementary classification (change)  
Search Report: 890913 A3 Separate publication of the European or International search report  
Examination: 900502 A2 Date of filing of request for examination: 900302  
Examination: 920930 A2 Date of despatch of first examination report: 920813  
Grant: 970416 B1 Granted patent



Change: 980114 B1 Representative (change)  
LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

| Available Text                     | Language  | Update | Word Count |
|------------------------------------|-----------|--------|------------|
| CLAIMS A                           | (English) | EPABF1 | 2068       |
| CLAIMS B                           | (English) | EPAB97 | 1850       |
| CLAIMS B                           | (German)  | EPAB97 | 1632       |
| CLAIMS B                           | (French)  | EPAB97 | 2065       |
| SPEC A                             | (English) | EPABF1 | 13054      |
| SPEC B                             | (English) | EPAB97 | 12811      |
| Total word count - document A      |           |        | 15123      |
| Total word count - document B      |           |        | 18358      |
| Total word count - documents A + B |           |        | 33481      |

5/5/11 (Item 1 from file: 157)  
DIALOG(R)File 157:Aidsline(R)  
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00017785 3125591 ICA7/3125591

Conservation of a dominant epitope within the third **variable**  
**region** of gp120.

Boudet F; Theze J; Zouali M  
Institut Pasteur, Immunogenetique Cellulaire, 75015 Paris, France  
Int Conf AIDS (ITALY) Jun 16-21 1991, 7 (2) p155 (abstract no.  
W.A.1255),

Languages: ENGLISH  
Document Type: ABSTRACT  
Journal Announcement: 9112  
Subfile: INDEX MEDICUS

One of the targets of neutralizing antibodies to the human immunodeficiency virus, HIV-1, lies within the third **variable region** (V3) of the external envelope glycoprotein gp120. Initially, it was found that this domain may be responsible for an isolate-restricted neutralizing antibody response in infected individuals as well as in experimentally immunized animals, that could be accounted for by the great diversity of its amino acid sequence on both sides of a highly conserved beta turn tetramer, GPGR. This region was referred to as the principal neutralizing determinant (PND). More recent studies showed that the sequence variability of the PND may not be as diverse as initially thought. To probe the diversity of the human antibody response to this region we evaluated the reactivity of 102 HIV-positive human sera with synthetic **peptides** corresponding to the PND of 12 different virus isolates (amino acid positions 303-324). The majority of the positive sera (75%) reacted with the PND of more than 4 isolates, and the MN, SF2 and NY5 isolates were recurrently recognized. **Inhibition** assays using a human serum with a broad immunoreactivity pattern showed that the binding to multiple isolates of the PND could be partially inhibited by some of the reactive synthetic **peptides**. In further studies, we determined the binding specificities of goat and mouse sera generated against a recombinant protein of gp120, PB1, derived from the HIV IIIB isolate and encompassing the neutralizing domain. We found that the immune sera reacted with synthetic **peptides** of various HIV-1 isolates. These data, together with recent evidence, support the view that this hypervariable region may comprise a conserved motif able to induce an antibody response to different HIV-1 isolates. The implications of this notion with regard to vaccine strategies will be discussed.

Tags: Animal; Human

Descriptors: \*Acquired Immunodeficiency Syndrome--Immunology--IM; \*HIV-1--Immunology--IM; \*Peptide Fragments--Immunology--IM; Amino Acid Sequence; Epitopes; HIV Antibodies--Biosynthesis--BI; Neutralization Tests; **Peptides**--Immunology--IM; Protein Conformation; Vaccines, Synthetic; Viral Vaccines

CAS Registry No.: 0 (Epitopes); 0 (HIV envelope protein gp120 (305-321)); 0 (HIV Antibodies); 0 (Peptide Fragments); 0 (Peptides); 0 (Vaccines, Synthetic); 0 (Viral Vaccines)

5/5/12 (Item 2 from file: 157)  
DIALOG(R)File 157:Aidsline(R)  
format only 1997 The Dialog Corporation. All rts. reserv.

00016833 30027690 ICA6/30027690

Neutralization epitopes on HIV-1 apparently include specificities outside **variable region 3**.

Quinnan G; Vujcic L; Garrow E; Seamon K; Hendry RM

CBER, FDA, Bethesda, Maryland, USA

Int Conf AIDS (UNITED STATES) Jun 20-23 1990, 6 (3) p151 (abstract no. S.A.276),

Languages: ENGLISH

Document Type: ABSTRACT

Journal Announcement: 9012

Subfile: INDEX MEDICUS

OBJECTIVE: To determine whether neutralization of HIV-1 by human sera is mediated only by antibodies directed against **variable region 3**

(V3) epitopes. METHODS: Neutralizing antibodies (NA) were measured using a syncytial focus **inhibition** test employing the IIIB and MN strains of HIV-1. Synthetic **peptides** corresponding to the V3 region of IIIB and MN were prepared by automated solid phase synthesis, purified by high performance liquid chromatography and adapted for use as antigens in ELISA and for blocking assays. RESULTS: The NA titers of the 10 sera tested varied from 1:16 to 1:512 against the IIIB strain, and 1:3,200 to 1:512,000 against the MN strain. The IIIB and MN V3 **peptides** were bound by 4/10 and 10/10 sera, respectively, in ELISA. Titers ranged from 1:1,000 to 1:10,000 against IIIB peptide, and from 400 to 1:102,400 against the MN peptide. **Inhibition** of NA against MN by addition of MN peptide to sera was complete in four, partial in five, and absent in one case. There was no significant correlation between MN and IIIB ELISA titers, between MN ELISA and NA titers, or between MN or IIIB ELISA or MN NA and degree of peptide blocking of MN NA. There was a strong correlation between NA titer against MN in the presence of optimal blocking concentrations of peptide and the NA titers of unblocked sera against IIIB. MN peptide did not block IIIB NA. CONCLUSIONS: The V3 domain is an important neutralization epitope on HIV-1, but a cross-reactive epitope exists which is commonly recognized and is apparently outside the V3 region.

Tags: Human; Male

Descriptors: Epitopes--Immunology--IM; \*HIV Envelope

Protein gp120--Immunology--IM; \*HIV Infections--Immunology--IM;

\*Immunoglobulin **Variable Region**--Immunology--IM; Binding Sites;

Chimpanzee troglodytes; Chromatography, High Pressure Liquid; Cross Reactions; Cytopathogenic Effect, Viral; HIV-1--Immunology--IM; Neutralization Tests

CAS Registry No.: 0 (Epitopes); 0 (HIV Envelope Protein gp120); 0 (Immunoglobulin Variable Region)

E for more  
? s e2

>>>One or more prefixes are unsupported  
>>> or undefined in one or more files.  
S6 3 AU="SASTRY, JAGANNADHA K."  
? rd

>>>Duplicate detection is not supported for File 307.  
>>>Duplicate detection is not supported for File 337.  
>>>Duplicate detection is not supported for File 340.  
>>>Duplicate detection is not supported for File 348.  
>>>Duplicate detection is not supported for File 351.  
>>>Duplicate detection is not supported for File 375.  
>>>Duplicate detection is not supported for File 456.

>>>Records from unsupported files will be retained in the RD set.  
...completed examining records  
S7 3 RD (unique items)  
? t s7/5/1-3

7/5/1 (Item 1 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
(c) 1998 American Chemical Society. All rts. reserv.

121278377 CA: 121(23)278377b CONFERENCE PROCEEDING  
Some synthetic peptides representing HIV-specific CTL epitopes fail to induce CTL responses in vivo: implications for vaccine development  
AUTHOR(S): Sastry, Jagannadha K.; Nehete, Pramod; Casement, Kevin; Arlinghaus, Ralph B.  
LOCATION: M. D. Anderson Cancer Cent., Univ. Texas, Houston, TX, 77030, USA  
JOURNAL: Vaccines 94: Mod. Approaches New Vaccines Incl. Prev. AIDS, (Annu. Meet.), 11th EDITOR: Norrby, Erling (Ed), DATE: 1994 PAGES: 175-80 CODEN: 60PMAJ LANGUAGE: English MEETING DATE: 930000 PUBLISHER: Cold Spring Harbor Lab. Press, Cold Spring Harbor, N.Y  
SECTION:  
CA215002 Immunochemistry  
IDENTIFIERS: HIV1 virus peptide cytolytic lymphocyte vaccine  
DESCRIPTORS:  
Proteins, specific or class...  
synthetic peptides from virus-specific cytolytic T cell epitopes fail to induce specific response in vivo  
Lymphocyte, T-cell, cytotoxic... Peptides, biological studies... Vaccines...  
Virus, animal, human immunodeficiency 1...  
synthetic peptides representing HIV-specific cytolytic T cell epitopes fail to induce specific response in vivo

7/5/2 (Item 2 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
(c) 1998 American Chemical Society. All rts. reserv.

119179173 CA: 119(17)179173j PATENT  
Peptide compositions for eliciting cytotoxic T-lymphocyte responses against viruses, including HIV  
INVENTOR(AUTHOR): Sastry, Jagannadha K.; Arlinghaus, Ralph B.; Platsoucas, Chris D.; Nehete, Pramod N.  
LOCATION: USA

ASSIGNEE: University of Texas System

PATENT: PCT International ; WO 9310816 A1 DATE: 930610

APPLICATION: WO 92US10378 (921202) \*US 800932 (911202) \*US 945865

(920916)

PAGES: 130 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: A61K-039/21A;  
A61K-039/12B; C12Q-001/02B DESIGNATED COUNTRIES: AT; AU; BB; BG; BR; CA;  
CH; CS; DE; DK; ES; FI; GB; HU; JP; KP; KR; LK; LU; MG; MN; MW; NL; NO; NZ;  
PL; PT; RO; RU; SD; SE; UA DESIGNATED REGIONAL: AT; BE; CH; DE; DK; ES; FR  
; GB; GR; IE; IT; LU; MC; NL; PT; SE; BF; BJ; CF; CG; CI; CM; GA; GN; ML;  
MR; SN; TD; TG

SECTION:

CA215002 Immunochemistry

IDENTIFIERS: peptide cytotoxic T cell enhancement, vaccine HIV peptide,  
antiviral peptide cytotoxic T cell

DESCRIPTORS:

Peptides,biological studies...

antiviral, with cytotoxic T-cell epitope and helper T-cell-inducing  
epitope or HIV infection-inhibiting sequence

Proteins,biological studies...

cytotoxic T-cell-inducing peptide or helper T-cell-inducing peptide  
derived from, of HIV or influenza virus or sendai virus, for anti-viral  
compn.

Virus,animal, influenza... Virus,animal, Sendai...

cytotoxic T-cell-inducing peptide or helper T-cell-inducing peptide  
derived from protein of, for antiviral compn.

Sialoglycoproteins,gp120env...

cytotoxic T-cell-inducing peptide or helper T-cell-inducing peptide or  
HIV infection-inhibiting peptide derived from, of HIV, for anti-HIV  
compn.

Gene,microbial, env... Gene,microbial, gag... Gene,microbial, pol...

cytotoxic T-cell-inducing peptide or helper T-cell-inducing peptide or  
HIV infection-inhibiting peptide derived from product of, of HIV, for  
anti-HIV compn.

Antibodies...

cytotoxic T-cell-inducing peptides which also elicit response to,  
antiviral in relation to

Virus,animal, human immunodeficiency 1...

gp120 V3 loop peptides effect on human cells infected with

Virus,animal, human immunodeficiency...

infection with, inhibition of, peptides for

Gene,microbial...

NEF, cytotoxic T-cell-inducing peptide or helper T-cell-inducing  
peptide or HIV infection-inhibiting peptide derived from product of, of  
HIV, for anti-HIV compn.

Molecular structure-biological activity relationship... Protein sequences

...

of HIV infection-inhibiting peptides

Lymphocyte,T-cell, cytotoxic... Lymphocyte,T-cell, helper cell...

peptide with epitope for induction of, for antiviral compn.

Glycoproteins,specific or class, gp160env...

peptides derived from, antibody and T-cell response to, cytotoxic  
T-cell-inducing peptides for antiviral compns. in relation to

Vaccines...

peptides inducing cytotoxic T-cell response for

Microorganism,pathogenic...

protein assocd. with, cytotoxic T-cell response to, compn. inducing,  
screening of

CAS REGISTRY NUMBERS:

115416-08-5 135540-12-4 149600-28-2 149600-29-3 149600-30-6 amino acid  
sequence of, as HIV infection-inhibiting peptide, cytotoxic  
T-cell-inducing antiviral peptide compns. in relation to  
114991-28-5 124693-73-8 124693-74-9 125159-22-0 139502-07-1  
139502-09-3 139502-10-6 139502-11-7 139502-12-8 139502-13-9  
139502-14-0 139502-15-1 146522-97-6 149600-23-7 149600-24-8  
149600-25-9 149600-26-0 149600-27-1 amino acid sequence of,  
cytotoxic T-cell-inducing antiviral peptides in relation to

135540-27-1 as helper T-cell-inducing peptide, for anti-HIV compn. with  
cytotoxic T-cell-inducing peptide  
135540-31-7D 135540-32-8D 135540-34-0D 135540-36-2D 135540-38-4D  
135540-41-9D 135540-42-0D 135540-43-1D 135540-44-2D 135540-45-3D  
135540-46-4D 135572-09-7D 135572-10-0D 149600-31-7D 149600-32-8D  
149600-33-9D 149600-34-0D 149600-35-1D 149600-36-2D cysteine-linked  
multimers, amino acid sequence and antibody and T-cell response of,  
cytotoxic T-cell-inducing anti-HIV compn. in relation to  
149600-37-3D 149600-38-4D 149600-39-5D 150375-16-9D fatty acid reaction  
products, amino acid sequence and antibody response of, cytotoxic  
T-cell-inducing anti-HIV compn. in relation to  
114416-46-5 133531-91-6 for cytotoxic T-cell-inducing antiviral peptide  
compn.

7/5/3 (Item 3 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
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117225784 CA: 117(23)225784t JOURNAL  
Membrane-permeable dideoxyuridine 5'-monophosphate analog inhibits human  
immunodeficiency virus infection  
AUTHOR(S): Sastry, Jagannadha K.; Nehete, Pramod N.; Khan, Saeed; Nowak,  
Billie J.; Plunkett, William; Arlinghaus, Ralph B.; Farquhar, David  
LOCATION: M. D. Anderson Cancer Cent., Univ. Texas, Houston, TX, 77030,  
USA  
JOURNAL: Mol. Pharmacol. DATE: 1992 VOLUME: 41 NUMBER: 3 PAGES: 441=5  
CODEN: MOPMA3 ISSN: 0026-895X LANGUAGE: English  
SECTION:  
CA201005 Pharmacology  
CA263XXX Pharmaceuticals  
IDENTIFIERS: dideoxyuridine prodrug HIV antiviral  
DESCRIPTORS:  
Pharmaceutical dosage forms, prodrugs...  
dideoxyuridine monophosphate analog as, membrane permeation by, HIV  
inhibition in relation to  
Virucides and Virustats...  
dideoxyuridine monophosphate prodrug as, HIV inhibition by  
Virus, animal, human immunodeficiency 1...  
infection with, treatment of, by membrane permeable dideoxyuridine  
monophosphate prodrug  
Biological transport, permeation...  
of dideoxyuridine monophosphate prodrug, HIV inhibition in relation to  
CAS REGISTRY NUMBERS:  
144510-15-6 antiviral activity of, as dideoxyuridine monophosphate  
prodrug, HIV inhibition by  
84445-38-5 144510-16-7 formation of, as dideoxyuridine monophosphate  
prodrug metabolite  
117605-34-2 formation of, as dideoxyuridine monophosphate prodrug  
metabolite, HIV inhibition by

E for more  
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S7 3 RD (unique items)  
? t s7/5/1-3

7/5/1 (Item 1 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
(c) 1998 American Chemical Society. All rts. reserv.

121278377 CA: 121(23)278377b CONFERENCE PROCEEDING  
Some synthetic peptides representing HIV-specific CTL epitopes fail to  
induce CTL responses in vivo: implications for vaccine development  
AUTHOR(S): Sastry, Jagannadha K.; Nehete, Pramod; Casement, Kevin;  
Arlinghaus, Ralph B.  
LOCATION: M. D. Anderson Cancer Cent., Univ. Texas, Houston, TX, 77030,  
USA  
JOURNAL: Vaccines 94: Mod. Approaches New Vaccines Incl. Prev. AIDS,  
(Annu. Meet.), 11th EDITOR: Norrby, Erling (Ed), DATE: 1994 PAGES:  
175-80 CODEN: 60PMAJ LANGUAGE: English MEETING DATE: 930000 PUBLISHER:  
Cold Spring Harbor Lab. Press, Cold Spring Harbor, N.Y  
SECTION:  
CA215002 Immunochemistry  
IDENTIFIERS: HIV1 virus peptide cytolytic lymphocyte vaccine  
DESCRIPTORS:  
Proteins, specific or class...  
synthetic peptides from virus-specific cytolytic T cell epitopes fail  
to induce specific response in vivo  
Lymphocyte, T-cell, cytotoxic... Peptides, biological studies... Vaccines...  
Virus, animal, human immunodeficiency 1...  
synthetic peptides representing HIV-specific cytolytic T cell epitopes  
fail to induce specific response in vivo

7/5/2 (Item 2 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
(c) 1998 American Chemical Society. All rts. reserv.

119179173 CA: 119(17)179173j PATENT  
Peptide compositions for eliciting cytotoxic T-lymphocyte responses  
against viruses, including HIV  
INVENTOR(AUTHOR): Sastry, Jagannadha K.; Arlinghaus, Ralph B.;  
Platsoucas, Chris D.; Nehete, Pramod N.  
LOCATION: USA

ASSIGNEE: University of Texas System

PATENT: PCT International ; WO 9310816 A1 DATE: 930610

APPLICATION: WO 92US10378 (921202) \*US 800932 (911202) \*US 945865

(920916)

PAGES: 130 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: A61K-039/21A;  
A61K-039/12B; C12Q-001/02B DESIGNATED COUNTRIES: AT; AU; BB; BG; BR; CA;  
CH; CS; DE; DK; ES; FI; GB; HU; JP; KP; KR; LK; LU; MG; MN; MW; NL; NO; NZ;  
PL; PT; RO; RU; SD; SE; UA DESIGNATED REGIONAL: AT; BE; CH; DE; DK; ES; FR  
; GB; GR; IE; IT; LU; MC; NL; PT; SE; BF; BJ; CF; CG; CI; CM; GA; GN; ML;  
MR; SN; TD; TG

SECTION:

CA215002 Immunochemistry

IDENTIFIERS: peptide cytotoxic T cell enhancement, vaccine HIV peptide,  
antiviral peptide cytotoxic T cell

DESCRIPTORS:

Peptides,biological studies...

antiviral, with cytotoxic T-cell epitope and helper T-cell-inducing  
epitope or HIV infection-inhibiting sequence

Proteins,biological studies...

cytotoxic T-cell-inducing peptide or helper T-cell-inducing peptide  
derived from, of HIV or influenza virus or sendai virus, for anti-viral  
compn.

Virus,animal, influenza... Virus,animal, Sendai...

cytotoxic T-cell-inducing peptide or helper T-cell-inducing peptide  
derived from protein of, for antiviral compn.

Sialoglycoproteins,gpl20env...

cytotoxic T-cell-inducing peptide or helper T-cell-inducing peptide or  
HIV infection-inhibiting peptide derived from, of HIV, for anti-HIV  
compn.

Gene,microbial, env... Gene,microbial, gag... Gene,microbial, pol...

cytotoxic T-cell-inducing peptide or helper T-cell-inducing peptide or  
HIV infection-inhibiting peptide derived from product of, of HIV, for  
anti-HIV compn.

Antibodies...

cytotoxic T-cell-inducing peptides which also elicit response to,  
antiviral in relation to

Virus,animal, human immunodeficiency 1...

gpl20 V3 loop peptides effect on human cells infected with

Virus,animal, human immunodeficiency...

infection with, inhibition of, peptides for

Gene,microbial...

NEF, cytotoxic T-cell-inducing peptide or helper T-cell-inducing  
peptide or HIV infection-inhibiting peptide derived from product of, of  
HIV, for anti-HIV compn.

Molecular structure-biological activity relationship... Protein sequences

...

of HIV infection-inhibiting peptides

Lymphocyte,T-cell, cytotoxic... Lymphocyte,T-cell, helper cell...

peptide with epitope for induction of, for antiviral compn.

Glycoproteins,specific or class, gpl60env...

peptides derived from, antibody and T-cell response to, cytotoxic  
T-cell-inducing peptides for antiviral compns. in relation to

Vaccines...

peptides inducing cytotoxic T-cell response for

Microorganism,pathogenic...

protein assocd. with, cytotoxic T-cell response to, compn. inducing,  
screening of

CAS REGISTRY NUMBERS:

115416-08-5 135540-12-4 149600-28-2 149600-29-3 149600-30-6 amino acid  
sequence of, as HIV infection-inhibiting peptide, cytotoxic

T-cell-inducing antiviral peptide compns. in relation to

114991-28-5 124693-73-8 124693-74-9 125159-22-0 139502-07-1

139502-09-3 139502-10-6 139502-11-7 139502-12-8 139502-13-9

139502-14-0 139502-15-1 146522-97-6 149600-23-7 149600-24-8

149600-25-9 149600-26-0 149600-27-1 amino acid sequence of,

cytotoxic T-cell-inducing antiviral peptides in relation to

135540-27-1 as helper T-cell-inducing peptide, for anti-HIV compn. with  
cytotoxic T-cell-inducing peptide  
135540-31-7D 135540-32-8D 135540-34-0D 135540-36-2D 135540-38-4D  
135540-41-9D 135540-42-0D 135540-43-1D 135540-44-2D 135540-45-3D  
135540-46-4D 135572-09-7D 135572-10-0D 149600-31-7D 149600-32-8D  
149600-33-9D 149600-34-0D 149600-35-1D 149600-36-2D cysteine-linked  
multimers, amino acid sequence and antibody and T-cell response of,  
cytotoxic T-cell-inducing anti-HIV compn. in relation to  
149600-37-3D 149600-38-4D 149600-39-5D 150375-16-9D fatty acid reaction  
products, amino acid sequence and antibody response of, cytotoxic  
T-cell-inducing anti-HIV compn. in relation to  
114416-46-5 133531-91-6 for cytotoxic T-cell-inducing antiviral peptide  
compn.

7/5/3 (Item 3 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
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117225784 CA: 117(23)225784t JOURNAL  
Membrane-permeable dideoxyuridine 5'-monophosphate analog inhibits human  
immunodeficiency virus infection  
AUTHOR(S): Sastry, Jagannadha K.; Nehete, Pramod N.; Khan, Saeed; Nowak,  
Billie J.; Plunkett, William; Arlinghaus, Ralph B.; Farquhar, David  
LOCATION: M. D. Anderson Cancer Cent., Univ. Texas, Houston, TX, 77030,  
USA  
JOURNAL: Mol. Pharmacol. DATE: 1992 VOLUME: 41 NUMBER: 3 PAGES: 441=5  
CODEN: MOPMA3 ISSN: 0026-895X LANGUAGE: English  
SECTION:  
CA201005 Pharmacology  
CA263XXX Pharmaceuticals  
IDENTIFIERS: dideoxyuridine prodrug HIV antiviral  
DESCRIPTORS:  
Pharmaceutical dosage forms, prodrugs...  
dideoxyuridine monophosphate analog as, membrane permeation by, HIV  
inhibition in relation to  
Virucides and Virustats...  
dideoxyuridine monophosphate prodrug as, HIV inhibition by  
Virus, animal, human immunodeficiency 1...  
infection with, treatment of, by membrane permeable dideoxyuridine  
monophosphate prodrug  
Biological transport, permeation...  
of dideoxyuridine monophosphate prodrug, HIV inhibition in relation to  
CAS REGISTRY NUMBERS:  
144510-15-6 antiviral activity of, as dideoxyuridine monophosphate  
prodrug, HIV inhibition by  
84445-38-5 144510-16-7 formation of, as dideoxyuridine monophosphate  
prodrug metabolite  
117605-34-2 formation of, as dideoxyuridine monophosphate prodrug  
metabolite, HIV inhibition by



0.8/869,386

=> s envelope and 15

63331 ENVELOPE  
L6 480 ENVELOPE AND L5

=> s peptides and 16

17046 PEPTIDES  
L7 228 PEPTIDES AND L6

=> s variable(4w) region

308906 VARIABLE  
394408 REGION  
L8 1518 VARIABLE (4W) REGION

=> s 18 and 17

L9 41 L8 AND L7

=> d 19 ab cit 1-41

US PAT NO: 5,707,626 [IMAGE AVAILABLE]

L9: 1 of 41

ABSTRACT:

Therapeutic strategies for the treatment of immunoinfective cluster virus infections in humans involving the use of antibodies or fragments thereof which are characteristic of autoantibodies produced by patients affected with systemic rheumatic disorders and cross-react with epitopes on an immunoinfective cluster virus. Additional therapeutic strategies include the use U1 RNA or fragments thereof to treat said viral infections.

1. 5,707,626, Jan. 13, 1998, Methods of treating **HIV** infection using antibodies to the U2 small nuclear ribonuclear protein; Angeline Douvas, et al., 424/160.1, 148.1, 152.1, 172.1 [IMAGE AVAILABLE]

US PAT NO: 5,702,707 [IMAGE AVAILABLE]

L9: 2 of 41

ABSTRACT:

A peptide of up to about 40 amino acids including the core sequence inclusive of amino acids at positions 92-109 of the p17 gag core protein of **HIV**-1, such as, Ile-Y.sub.1 -Y.sub.2 -Lys-Asp-Thr-Lys-Glu-Ala-Leu-Y.sub.3 -Lys-Ile-Glu-Glu-Glu-Gln-Asn

wherein

Y.sub.1 is Asp or Glu,

Y.sub.2 is Val or Ile, and

Y.sub.3 is Glu or Asp,

is effective in inhibiting replication of the **HIV** virus and provides the basis for a vaccine for treatment or prevention of AIDS.

2. 5,702,707, Dec. 30, 1997, Diagnostic **method** and test kit for the serological detection of the AIDS virus; Allan L. Goldstein, et al., 424/208.1, 204.1; 530/350 [IMAGE AVAILABLE]

US PAT NO: 5,698,390 [IMAGE AVAILABLE]

L9: 3 of 41

ABSTRACT:

A family of cDNA sequences derived from hepatitis C virus (HCV) are

provided. These sequences encode antigens which react immunologically with antibodies present in individuals with non-A non-B hepatitis (NANBH), but which are absent from individuals infected with hepatitis A virus, or hepatitis B virus, and also are absent in control individuals. The HCV cDNA sequences lack substantial homology to the sequences of hepatitis delta virus (HDV) and HBV. A comparison of the sequences of amino acids encoded in the HCV cDNA with the sequences of Flaviviruses indicates that HCV may be related to the Flaviviruses. The HCV cDNA sequences and the polypeptides encoded therein are useful as reagents for the detection and therapy of HCV. The reagents provided in the invention are also useful for the isolation of NANBH agent(s), for the propagation of these agents in tissue culture, and for the screening of antiviral agents for HCV.

3. 5,698,390, Dec. 16, 1997, Hepatitis C immunoassays; Michael Houghton, et al., 435/5; 436/518, 820 [IMAGE AVAILABLE]

US PAT NO: 5,693,752 [IMAGE AVAILABLE] L9: 4 of 41

ABSTRACT:

This invention refers to **peptides** binding to antibodies that show neutralizing activity against different strains and clinical isolates of **HIV-1** and that inhibit the fusion of cells caused by **HIV-1**. These **peptides** are applied with an adjuvant, as recombinant fusion proteins, chemically coupled to carrier molecules, as recombinant chimeric viruses or as recombinant antibodies.

4. 5,693,752, Dec. 2, 1997, **Peptides** that induce antibodies which neutralize genetically divergent **HIV-1** isolates; Hermann Katinger, et al., 530/329; 424/184.1, 188.1, 204.1, 208.1; 530/350 [IMAGE AVAILABLE]

US PAT NO: 5,691,135 [IMAGE AVAILABLE] L9: 5 of 41

ABSTRACT:

VH3 and VH4 type immunoglobulins display superantigen-type binding affinity for the **HIV** gp120 **envelope** glycoprotein. VH3 and VH4 type antibody molecules, including IgG and IgM, are shown to suppress **HIV** infection in vivo and in vitro. Determining the level of such antibody molecules is correlated to the advancement of **HIV** disease state.

5. 5,691,135, Nov. 25, 1997, Immunoglobulin superantigen binding to gp 120 from **HIV**; Jonathan Braun, et al., 435/5, 7.1, 7.2, 7.24, 7.92, 974 [IMAGE AVAILABLE]

US PAT NO: 5,674,984 [IMAGE AVAILABLE] L9: 6 of 41

ABSTRACT:

Methods for producing and isolating unclipped **HIV** env proteins are provided. According to the methods, an antibody directed to an **HIV** epitope spanning the env clip site is used to selectively separate unclipped **HIV** env protein from clipped env protein.

6. 5,674,984, Oct. 7, 1997, **Method** for isolation of unclipped **HIV envelope** protein; Phillip W. Berman, et al., 530/413, 388.35, 412 [IMAGE AVAILABLE]

US PAT NO: 5,665,569 [IMAGE AVAILABLE] L9: 7 of 41

ABSTRACT:

The present invention provides monoclonal antibodies that are specifically immunoreactive with an **HIV-1** gp120 protein or its precursor gp160 protein comprising the amino acid sequence set out in SEQ ID NO: 1, G-P-G-R, and characterized by their ability to neutralize, in vitro, the infection of H9 cells by live **HIV-1** strains MN and

III.sub.B as determined by reverse transcriptase, p24, MT-2 and syncytium formation assays. Presently preferred antibody NM-01 isolated from mouse/mouse hybridoma ATCC HB 10726 is further characterized by its capacity to mediate complement-dependent virolysis of **HIV-1** particles and antibody-dependent cellular cytotoxicity of **HIV-1** infected cells. Antibodies consisting essentially of a human antibody **variable region** comprising a sequence of amino acids of at least one complementarity determining region of the monoclonal antibody produced by the hybridoma cell line ATCC HB 10726 are specifically disclosed. Pharmaceutical compositions of the invention are projected to be useful in the passive immunization treatment of animals, especially humans, susceptible to or infected with **HIV-1**.

7. 5,665,569, Sep. 9, 1997, **HIV** immunotherapeutics; Tsuneya Ohno, 435/69.6, 69.7, 252.3, 320.1; 536/23.4, 23.53 [IMAGE AVAILABLE]

US PAT NO: 5,665,536 [IMAGE AVAILABLE] L9: 8 of 41

ABSTRACT:

Vaccines effective in the **inhibition** of infection caused by the family of retroviruses, HTLV-III, Human T-Cell Leukemia Virus, LAV, Lymphadenopathy-associated virus, ARV-2, AIDS-Related Virus, (AIDS and AIDS-Related Complex) have been developed from an antisera prepared against thymosin .alpha..sub.1 (T.alpha..sub.1), a thymic hormone, as well as from antisera to synthetic peptide fragments of T.alpha..sub.1 and antisera to synthetic peptide fragments inclusive of amino acid positions 92-109 of the p17 gag core protein of HTLV-III, LAV and ARV-2. In this 18 amino acid primary sequence there is a 44 to 50% homology between the gag protein and T.alpha..sub.1. Immunoglobulin (IgG)-enriched preparations of the T.alpha..sub.1 antisera have enhanced activity in blocking vital replication. A diagnostic test capable of directly detecting the presence of HTLV-III, LAV, ARV-2 and related retroviruses associated with AIDS and ARC is also described.

8. 5,665,536, Sep. 9, 1997, Diagnostic **method** and test kit for the serological detection of the AIDS virus; Allan L. Goldstein, et al., 435/5, 7.1, 7.92, 7.93, 7.94, 7.95, 974, 975; 436/516; 530/324, 826 [IMAGE AVAILABLE]

US PAT NO: 5,665,355 [IMAGE AVAILABLE] L9: 9 of 41

ABSTRACT:

The invention provides assays for the presence or absence of CD4+ T cell subpopulations carrying particular V.beta. components of the T cell receptor (TCR-V.beta.) in persons infected with **HIV**, including amplification of mRNA from T cells with primers specific to each TCR-V.beta. to detect the presence or absence of each TCR-V.beta. in a sample and primers for use in such amplification assays are disclosed. The invention also provides assays of antibody-containing fluids of a person infected with **HIV** to determine the immunodeficiency where the fluid is suspected to contain an antibody having a paratope specific to an epitope on a TCR-V.beta.. The invention also provides a binding agent specific to a paratope where the paratope is specific to an epitope on a TCR-V.beta.. The invention also provides a **method** of assay of the fluids of a person infected with **HIV** to determine the immunodeficiency of the person which utilizes a binding agent specific to complexes containing anti-TCR-V.beta. antibody bound to TCR-V.beta.. The invention also provides a **method** of treatment of a person infected with **HIV** to attenuate or avert immunodeficiency which utilize a binding agent that is homologous with an epitope on TCR-V.beta.. The invention also provides a **method** of treatment of a person infected with **HIV** to attenuate or avert immunodeficiency which involves removing an antibody capable of binding to an epitope on TCR-V.beta. from the blood of a person infected with **HIV**. Finally, the invention provides a **method** of vaccination of a person infected or at risk for infection with **HIV** which raises antiidiotypic antibodies specific to

free antibodies containing a paratope specific to an epitope on a TCR-V.beta..

9. 5,665,355, Sep. 9, 1997, Diagnosis and treatment of AIDS onset; Daniele Primi, 424/140.1, 160.1; 435/974 [IMAGE AVAILABLE]

US PAT NO: 5,658,569 [IMAGE AVAILABLE] L9: 10 of 41

ABSTRACT:

The disclosure relates to antibodies reactive with **HIV-1** antigens and the use of such antibodies in vaccine preparations, immunotherapeutic preparations and assays for **HIV-1**.

10. 5,658,569, Aug. 19, 1997, Anti-**HIV-1** neutralizing antibodies; Kurt B. Osther, et al., 424/148.1, 208.1; 530/388.85 [IMAGE AVAILABLE]

US PAT NO: 5,637,677 [IMAGE AVAILABLE] L9: 11 of 41

ABSTRACT:

A **method** of constructing biologically active compounds which mimic the biological activity of the biologically active protein or which block the activity of the biologically active protein is disclosed. A **method** of identifying specific and discrete portions of pathogen antigens which either serve as epitopes for neutralizing antibodies or which are involved in pathogen binding to host cell receptors is disclosed. A **method** of constructing biologically active compounds which compete with cellular receptors for binding to either biologically active proteins or pathogen antigens is disclosed.

11. 5,637,677, Jun. 10, 1997, Biologically active compounds and methods of constructing and using the same; Mark I. Greene, et al., 530/333; 424/185.1; 435/7.1; 530/300, 350, 387.2, 388.22, 388.3 [IMAGE AVAILABLE]

US PAT NO: 5,631,137 [IMAGE AVAILABLE] L9: 12 of 41

ABSTRACT:

Disclosed and claimed are methods for selecting a recombinant virus, phage or cell expressing a catalytic antibody or catalytic portion thereof, or for selecting catalytic activity by a moiety. The **method** employs reaction-based selection for catalytic activity. The **method** can also be used to concentrate (increase the proportion of catalytic to non-catalytic moieties) a sample containing a catalytic moiety or viruses, phages or cells expressing a catalytic moiety. The selection or concentrating can be by employing a mechanism-based inhibitor, catalysis-accelerated movement, surface binding, changes in enthalpic component of binding as a function of temperature, or changes in binding by competition, or combinations thereof. The invention also comprehends a **method** for producing a recombinant virus or a cell-line expressing a catalytic moiety such as a catalytic antibody or catalytic portion thereof; and, this **method** can include infecting a suitable host with viruses which are screened for the expression. In addition, recombinant viruses and cell-lines so expressing a catalytic moiety such as a catalytic antibody or catalytic portion thereof are also disclosed and claimed.

12. 5,631,137, May 20, 1997, Reaction-based selection for expression of and concentration of catalytic moieties; Mark T. Martin, et al., 435/7.6, 7.4 [IMAGE AVAILABLE]

US PAT NO: 5,629,192 [IMAGE AVAILABLE] L9: 13 of 41

ABSTRACT:

The present invention relates, in general, to methods for reducing cell tumorigenicity. More particularly, the present invention provides a **method** for reducing cell tumorigenicity comprising transfecting a tumor cell with an ETS1 gene, the tumor cell not endogenously expressing

the ETS1 gene. In addition, the present invention provides a **method** for reducing cell tumorigenicity comprising contacting a tumor cell with a peptide expressed by an ETS1 gene, the tumor cell not endogenously expressing the ETS1 gene. The methods of the present invention are particularly useful for reducing tumorigenicity in epithelial tumor cells.

13. 5,629,192, May 13, 1997, ETS1 gene: a human tumor suppressor gene; Hiroaki Suzuki, et al., 435/172.3; 514/44; 536/23.5; 935/62 [IMAGE AVAILABLE]

US PAT NO: 5,618,922 [IMAGE AVAILABLE]

L9: 14 of 41

**ABSTRACT:**

The present invention provides a monoclonal antibody, designated NM03, which specifically binds **HIV**-1 gp 120.

14. 5,618,922, Apr. 8, 1997, NM03 antibody materials and methods; Tsuneya Ohno, et al., 530/388.35; 424/148.1; 435/331, 339.1; 530/387.9 [IMAGE AVAILABLE]

US PAT NO: 5,603,933 [IMAGE AVAILABLE]

L9: 15 of 41

**ABSTRACT:**

Disclosed are compositions and methods for use in viral binding and inactivation and in protecting cells from viral infection, particularly, for use in protecting target human CD4.sup.+ cells from infection by **HIV**. **Peptides** including short sequences from CD4 are identified as being particularly effective at binding to gp120 and inhibiting or reducing **HIV** infection of human CD4.sup.+ cells by steric hinderance or catalytic inactivation of gp120. The invention thus encompasses improved CD4-based peptide compositions and therapeutic formulations with viral binding and **HIV**-inhibitory activity.

15. 5,603,933, Feb. 18, 1997, CD4 **peptides** for binding to viral **envelope** proteins; Victor A. Dwyer, IV, et al., 424/185.1; 435/5; 514/15, 16, 17, 18; 530/328, 329, 330, 402 [IMAGE AVAILABLE]

US PAT NO: 5,593,972 [IMAGE AVAILABLE]

L9: 16 of 41

**ABSTRACT:**

Methods of prophylactic and therapeutic immunization of an individual against pathogen infection, diseases associated with hyperproliferative cells and autoimmune diseases are disclosed. The methods comprise the steps of administering to cells of an individual, a nucleic acid molecule that comprises a nucleotide sequence that encodes a protein which comprises at least one epitope that is identical or substantially similar to an epitope of a pathogen antigen, a hyperproliferative cell associated protein or a protein associated with autoimmune disease respectively. In each case, nucleotide sequence is operably linked to regulatory sequences to enable expression in the cells. The nucleic acid molecule is free of viral particles and capable of being expressed in said cells. The cells may be contacted cells with a cell stimulating agent. Methods of prophylactically and therapeutically immunizing an individual against **HIV** are disclosed. Pharmaceutical compositions and kits for practicing methods of the present invention are disclosed.

16. 5,593,972, Jan. 14, 1997, Genetic immunization; David B. Weiner, et al., 514/44; 424/278.1; 514/615, 818 [IMAGE AVAILABLE]

US PAT NO: 5,571,698 [IMAGE AVAILABLE]

L9: 17 of 41

**ABSTRACT:**

In order to obtain a novel binding protein against a chosen target, DNA molecules, each encoding a protein comprising one of a family of similar potential binding domains and a structural signal calling for the display

of the protein on the outer surface of a chosen bacterial cell, bacterial spore or phage (genetic package) are introduced into a genetic package. The protein is expressed and the potential binding domain is displayed on the outer surface of the package. The cells or viruses bearing the binding domains which recognize the target molecule are isolated and amplified. The successful binding domains are then characterized. One or more of these successful binding domains is used as a model for the design of a new family of potential binding domains, and the process is repeated until a novel binding domain having a desired affinity for the target molecule is obtained. In one embodiment, the first family of potential binding domains is related to bovine pancreatic trypsin inhibitor, the genetic package is M13 phage, and the protein includes the outer surface transport signal of the M13 gene III protein.

17. 5,571,698, Nov. 5, 1996, Directed evolution of novel binding proteins; Robert C. Ladner, et al., 435/69.7, 6, 69.1, 172.3, 252.3, 320.1 [IMAGE AVAILABLE]

US PAT NO: 5,567,584 [IMAGE AVAILABLE]

L9: 18 of 41

**ABSTRACT:**

Methods for producing secreted receptor analogs and biologically active peptide dimers are disclosed. The methods for producing secreted receptor analogs and biologically active peptide dimers utilize a DNA sequence encoding a receptor analog or a peptide requiring dimerization for biological activity joined to a dimerizing protein. The receptor analog includes a ligand-binding domain. Polypeptides comprising essentially the extracellular domain of a human PDGF receptor fused to dimerizing proteins, the portion being capable of binding human PDGF or an isoform thereof, are also disclosed. The polypeptides may be used within methods for determining the presence of and for purifying human PDGF or isoforms thereof.

18. 5,567,584, Oct. 22, 1996, Methods of using biologically active dimerized polypeptide fusions to detect PDGF; Andrzej Z. Sledziewski, et al., 435/6, 7.1, 69.7; 436/501; 536/23.4 [IMAGE AVAILABLE]

US PAT NO: 5,565,332 [IMAGE AVAILABLE]

L9: 19 of 41

**ABSTRACT:**

Methods are disclosed which may be used for the production of antibodies, or antibody fragments, which have the same binding specificity as a parent antibody but which have increased human characteristics. Humanized antibodies may be obtained by chain shuffling, perhaps using phage display technology. In one embodiment, a polypeptide comprising a heavy or light chain variable domain of a non-human antibody specific for an antigen of interest is combined with a repertoire of human complementary (light or heavy) chain variable domains. Hybrid pairings which are specific for the antigen of interest are selected. Human chains from the selected pairings may then be combined with a repertoire of human complementary variable domains (heavy or light) and humanized antibody polypeptide dimers can then be selected for binding specificity for antigen. The methods may be combined with CDR-imprinting. In another embodiment, component part of an antigen-binding site of a non-human antibody known to bind a particular antigen is combined with a repertoire of component parts of an antigen-binding site of human antibody, forming a library of antibody polypeptide dimers with antigen-binding sites. Hybrids selected from this library may be used in a second humanizing shuffling step, or may already be of sufficient human character to be of value, perhaps after some modification to increase human character still further.

19. 5,565,332, Oct. 15, 1996, Production of chimeric antibodies - a combinatorial approach; Hendricus R. J. M. Hoogenboom, et al., 435/69.1, 5, 69.7, 69.8, 91.1, 235.1, 252.3, 252.33, 320.1; 530/387.1, 387.3, 867;

## ABSTRACT:

The present invention provides monoclonal antibodies that are specifically immunoreactive with an **HIV-1** gp120 protein or its precursor gp160 protein comprising the amino acid sequence set out in SEQ ID NO: 1, G-P-G-R, and characterized by their ability to neutralize, in vitro, the infection of H9 cells by live **HIV-1** strains MN and III.sub.B as determined by reverse transcriptase, p24, MT-2 and syncytium formation assays. Presently preferred antibody NM-01 isolated from mouse/mouse hybridoma ATCC HB 10726 is further characterized by its capacity to mediate complement-dependent virolysis of **HIV-1** particles and antibody-dependent cellular cytotoxicity of **HIV-1** infected cells. Antibodies consisting essentially of a human antibody **variable region** comprising a sequence of amino acids of at least one complementarity determining region of the monoclonal antibody produced by the hybridoma cell line ATCC HB 10726 are specifically disclosed. Pharmaceutical compositions of the invention are projected to be useful in the passive immunization treatment of animals, especially humans, susceptible to or infected with **HIV-1**.

20. 5,558,865, Sep. 24, 1996, **HIV** immunotherapeutics; Tsuneya Ohno, 424/148.1, 130.1, 139.1, 141.1; 435/339.1; 530/387.1, 387.9, 388.1, 388.35 [IMAGE AVAILABLE]

## ABSTRACT:

This invention provides novel methods and reagents for specifically delivering biologically active compounds to phagocytic mammalian cells. The invention also relates to specific uptake of such biologically active compounds by phagocytic cells and delivery of such compounds to specific sites intracellularly. The invention specifically relates to methods of facilitating the entry of antimicrobial drugs and other agents into phagocytic cells and for targeting such compounds to specific organelles within the cell. The invention specifically provides compositions of matter and pharmaceutical embodiments of such compositions comprising conjugates of such antimicrobial drugs and agents covalently linked to particulate carriers generally termed microparticles. In particular embodiments, the antimicrobial drug is covalently linked to a microparticle via an organic linker molecule which is the target of a microorganism-specific protein having enzymatic activity. Thus, the invention provides cell targeting of drugs wherein the targeted drug is only released in cells infected with a particular microorganism. Alternative embodiments of such specific drug delivery compositions also contain polar lipid carrier molecules effective in achieving intracellular organelle targeting in infected phagocytic mammalian cells. Particular embodiments of such conjugates comprise antimicrobial drugs covalently linked both to a microparticle via an organic linker molecule and to a polar lipid compound, to facilitate targeting of such drugs to particular subcellular organelles within the cell. Also provided are porous microparticles impregnated with antimicrobial drugs and agents wherein the surface or outside extent of the microparticle is covered with a degradable coating that is specifically degraded within an infected phagocytic mammalian cell. Methods of inhibiting, attenuating, arresting, combatting and overcoming microbial infection of phagocytic mammalian cells in vivo and in vitro are also provided.

21. 5,543,391, Aug. 6, 1996, Covalent microparticle-drug conjugates for biological targeting; Milton B. Yatvin, et al., 514/2; 424/450; 514/78; 530/300, 329, 331; 536/21, 51 [IMAGE AVAILABLE]

ABSTRACT:

This invention provides novel methods and reagents for specifically delivering biologically active compounds to phagocytic mammalian cells. The invention also relates to specific uptake of such biologically active compounds by phagocytic cells and delivery of such compounds to specific sites intracellularly. The invention specifically relates to methods of facilitating the entry of antimicrobial drugs and other agents into phagocytic cells and for targeting such compounds to specific organelles within the cell. The invention specifically provides compositions of matter and pharmaceutical embodiments of such compositions comprising conjugates of such antimicrobial drugs and agents covalently linked to particulate carriers generally termed microparticles. In particular embodiments, the antimicrobial drug is covalently linked to a microparticle via an organic linker molecule which is the target of a microorganism-specific protein having enzymatic activity. Thus, the invention provides cell targeting of drugs wherein the targeted drug is only released in cells infected with a particular microorganism. Alternative embodiments of such specific drug delivery compositions also contain polar lipid carrier molecules effective in achieving intracellular organelle targeting in infected phagocytic mammalian cells. Particular embodiments of such conjugates comprise antimicrobial drugs covalently linked both to a microparticle via an organic linker molecule and to a polar lipid compound, to facilitate targeting of such drugs to particular subcellular organelles within the cell. Also provided are porous microparticles impregnated with antimicrobial drugs and agents wherein the surface or outside extent of the microparticle is covered with a degradable coating that is specifically degraded within an infected phagocytic mammalian cell. Methods of inhibiting, attenuating, arresting, combatting and overcoming microbial infection of phagocytic mammalian cells in vivo and in vitro are also provided.

22. 5,543,390, Aug. 6, 1996, Covalent microparticle-drug conjugates for biological targeting; Milton B. Yatvin, et al., 514/2; 424/450; 530/300, 329, 331; 536/28.2, 51, 78 [IMAGE AVAILABLE]

US PAT NO: 5,532,214 [IMAGE AVAILABLE]

L9: 23 of 41

ABSTRACT:

A new protein, termed TAP 29, obtainable from the root tuber of the plant *Trichosanthes kirilowii* or produced by recombinant means is useful for treating **HIV** infections or tumors. In treating **HIV** infections, the protein is administered alone or in conjunction with conventional AIDS therapies. Also provided are processes for purifying the protein, DNA sequences encoding the protein, hosts expressing the protein, recombinant DNA methods for expressing the protein, and antibodies specific for the protein.

23. 5,532,214, Jul. 2, 1996, Anti-**HIV** protein, TAP 29, from *trichosanthes*, DNA coding therefor and therapeutic uses thereof; Sylvia Lee-Huang, et al., 514/2; 530/370 [IMAGE AVAILABLE]

US PAT NO: 5,529,776 [IMAGE AVAILABLE]

L9: 24 of 41

ABSTRACT:

The disclosure relates to antibodies reactive with **HIV-1** antigens and the use of such antibodies in vaccine preparations, immunotherapeutic preparations and assays for **HIV-1**.

24. 5,529,776, Jun. 25, 1996, Anti-**HIV-1** neutralizing antibodies; Kurt B. Osthert, et al., 424/160.1; 530/389.4 [IMAGE AVAILABLE]

US PAT NO: 5,484,889 [IMAGE AVAILABLE]

L9: 25 of 41

ABSTRACT:

A protein, in particular MAP 30, obtainable from both the fruit and seeds of *Momordica charantia* or produced by recombinant means useful for



treating tumors and **HIV** infections is disclosed. In treating **HIV** infections, the protein is administered alone or in conjunction with conventional AIDS therapies. Also provided are processes for purifying the protein, DNA sequences encoding the protein, and recombinant DNA methods for expressing the protein.

25. 5,484,889, Jan. 16, 1996, Plant protein useful for treating tumors and **HIV** infection; Sylvia Lee-Huang, et al., 530/379, 370 [IMAGE AVAILABLE]

US PAT NO: 5,422,274 [IMAGE AVAILABLE]

L9: 26 of 41

**ABSTRACT:**

This invention provides a therapeutic agent capable of specifically forming a complex with human immunodeficiency virus **envelope** glycoprotein which comprises a polypeptide. In one embodiment of the invention, the amino acid sequence of the polypeptide has the amino acid sequence shown in FIG. 6 from about +1 to about +185 fused to the amino acid sequence from about +353 to about +371. In another embodiment of the invention, the amino acid sequence of the polypeptide has the amino acid sequence shown in FIG. 6 from about +1 to about +106 fused to the amino acid sequence from about +353 to about +371. In yet a further embodiment of the invention, the amino acid sequence of the polypeptide has the amino acid sequence shown in FIG. 6 from about +1 to about +185. This invention also provides a **method** for treating a subject infected with a human immunodeficiency virus. The **method** treats the subject with an effective amount of a pharmaceutical composition having an effective amount of a therapeutic agent of the invention and a pharmaceutically acceptable carrier.

26. 5,422,274, Jun. 6, 1995, Internal deletion mutants of soluble T4(CD4); Paul J. Maddon, et al., 435/320.1; 424/188.1, 208.1; 435/69.4, 69.6, 172.3; 530/388.35; 536/23.1 [IMAGE AVAILABLE]

US PAT NO: 5,420,264 [IMAGE AVAILABLE]

L9: 27 of 41

**ABSTRACT:**

The present invention relates, in general, to substantially pure polynucleotide molecules specifying chimpanzee or rhesus monkey CD4, and fragments thereof and Gp120 binding molecules related to human CD4. The present invention further relates to polynucleotide molecules specifying CD4 fusion proteins and host cells containing the polynucleotide molecules.

27. 5,420,264, May 30, 1995, Non-human primate CD4 polypeptides, human CD4 molecules capable of glycosylation, fragments thereof, fusion proteins thereof, genetic sequences thereof, and the use thereof; Brian Seed, et al., 435/365, 243, 252.3, 320.1; 536/23.1, 23.4, 23.5, 23.53; 935/1, 11, 22 [IMAGE AVAILABLE]

US PAT NO: 5,350,671 [IMAGE AVAILABLE]

L9: 28 of 41

**ABSTRACT:**

Immunoassays for the detection of antibodies to HCV are provided which employ "C" domain antigens. Immunoassay kits comprising such antigens are also provided.

28. 5,350,671, Sep. 27, 1994, HCV immunoassays employing C domain antigens; Michael Houghton, et al., 435/5, 6, 975; 436/512, 518; 530/300, 326, 327, 328, 812, 826; 930/220, 223 [IMAGE AVAILABLE]

US PAT NO: 5,317,009 [IMAGE AVAILABLE]

L9: 29 of 41

**ABSTRACT:**

New proteins, termed GAP 31, obtainable from the seeds of *Gelonium multiflorum*, and DAP 30 and DAP 32, obtainable from the leaves or seeds

of *Dianthus caryophyllus*, or the above proteins produced by recombinant means, are useful for treating HIV infections. In treating HIV infections, the protein is administered alone or in conjunction with other anti-HIV therapeutics. Also provided are processes for purifying the proteins, DNA sequences encoding the proteins, hosts expressing the proteins, recombinant DNA methods for expressing the proteins, and antibodies specific for the proteins.

29. 5,317,009, May 31, 1994, Anti-HIV proteins GAP 31, DAP 30 and DAP 32 and therapeutic uses thereof; Sylvia Lee-Huang, et al., 514/8, 12, 885; 530/370, 377, 387.1, 395 [IMAGE AVAILABLE]

US PAT NO: 5,266,478 [IMAGE AVAILABLE] L9: 30 of 41

ABSTRACT:

Disclosed are monoclonal antibodies and related products which bind to the second **variable region** of HIV-1 gp120 and synthetic **peptides** and anti-idiotypic antibodies which induce endogenous production of antibodies with these same properties.

30. 5,266,478, Nov. 30, 1993, Antibodies which target a neutralization site within the second **variable region** of human immunodeficiency virus type 1 gp120; Tse W. Chang, et al., 435/328; 530/327, 387.1, 387.3, 387.9, 388.35, 391.3 [IMAGE AVAILABLE]

US PAT NO: 5,245,015 [IMAGE AVAILABLE] L9: 31 of 41

ABSTRACT:

The monoclonal antibodies (mAbs) of the invention bind to a neutralizing epitope on the gp120 glycoprotein of HIV-1. The binding seems to be conformation-dependent, in the sense that altering the conformation of gp120 (by deglycosylating the gp120, by reducing the cysteine bonds in the peptide backbone) will inhibit the binding. The mAbs of the invention are group specific and can neutralize different strains and different isolates of HIV-1. The binding of these mAbs to gp120 is enhanced by the binding of other antibodies to the principal neutralizing determinant (amino acid residue numbers 296-331) of gp120.

31. 5,245,015, Sep. 14, 1993, Monoclonal antibodies which neutralize HIV-1 through reaction with a conformational epitope in vitro; Michael S. C. Fung, et al., 530/388.35; 424/148.1; 435/69.6, 172.2, 339.1; 530/388.3, 389.4, 809, 866; 536/23.53; 935/15, 95 [IMAGE AVAILABLE]

US PAT NO: 5,234,905 [IMAGE AVAILABLE] L9: 32 of 41

ABSTRACT:

A **method** for extending soluble CD4 serum half-life in mammals is described. The **method** comprises modifying soluble CD4 glycosylation so as to inhibit clearance from serum. In a preferred embodiment, clearance by hepatocyte galactose receptors is inhibited by removal of soluble CD4 terminal sialic residues followed by oxidation of exposed galactose residues. The modified soluble CD4 molecules are demonstrated to possess extended serum half-life.

32. 5,234,905, Aug. 10, 1993, Soluble CD4 molecules modified to prolong circulating half-life; J. Fred Kolhouse, et al., 514/8; 530/350, 395, 402 [IMAGE AVAILABLE]

US PAT NO: 5,227,159 [IMAGE AVAILABLE] L9: 33 of 41

ABSTRACT:

B-cell lymphomas express surface immunoglobulin (immunoglobulin) containing unique idiotypic (idiotypic) determinants which may be exploited as tumor specific markers. The inventor has produced murine monoclonal antibodies (MAbs) reactive with the idiotype marker derived

from 67 patients with low grade, follicular, small cleaved cell lymphoma. Out of 199 monoclonal antibodies, 47 (24%) were found to react with pooled normal human serum immunoglobulin in concentrations ranging from 0.6 .mu.g/ml to 160 .mu.g/ml. Of these 40 monoclonal antibodies, 90% cross-reacted with idiotype present in normal serum in levels <50 .mu.g/ml. Thirty-two of these anti-idiotypes were directed against a shared idiotope expressed on another patient's lymphoma cells. The frequency of shared idiotope expression defined by each antibody ranged from 0.26% to 3.9% of the B-cell lymphomas tested. A panel of five anti-idiotype antibodies reacted with 80% of AIDS associated lymphomas. Based on the reactivity with these monoclonal antibodies, tumors could be grouped into distinct families. In aggregate, these 32 monoclonal antibodies reacted with a total of 108 of 332 B cell lymphoma cases (32.5%), including 35 of 116 follicular, small cleaved cell lymphomas (30%). Many of these anti-shared idiotopes reacted with more than one histopathologic subtype of lymphoma. Anti-idiotypes have been used in B-cell lymphoma diagnosis and therapy. Moreover, applicant has discovered at least seven anti-shared idiotype antibodies that cross react with autoantibodies, e.g., 16.6 and RF. The development of a library of anti-idiotypes reactive with shared idiotopes should facilitate these clinical studies by obviating the need to develop a customized hybridoma for each patient.

33. 5,227,159, Jul. 13, 1993, Anti-idiotype antibodies reactive with shared idiotopes expressed by B cell lymphomas and autoantibodies; Richard A. Miller, 424/131.1, 153.1; 435/70.21, 172.2; 530/387.2, 388.73, 388.8; 935/104, 107 [IMAGE AVAILABLE]

US PAT NO: 5,223,409 [IMAGE AVAILABLE]

L9: 34 of 41

ABSTRACT:

In order to obtain a novel binding protein against a chosen target, DNA molecules, each encoding a protein comprising one of a family of similar potential binding domains and a structural signal calling for the display of the protein on the outer surface of a chosen bacterial cell, bacterial spore or phage (genetic package) are introduced into a genetic package. The protein is expressed and the potential binding domain is displayed on the outer surface of the package. The cells or viruses bearing the binding domains which recognize the target molecule are isolated and amplified. The successful binding domains are then characterized. One or more of these successful binding domains is used as a model for the design of a new family of potential binding domains, and the process is repeated until a novel binding domain having a desired affinity for the target molecule is obtained. In one embodiment, the first family of potential binding domains is related to bovine pancreatic trypsin inhibitor, the genetic package is M13 phage, and the protein includes the outer surface transport signal of the M13 gene III protein.

34. 5,223,409, Jun. 29, 1993, Directed evolution of novel binding proteins; Robert C. Ladner, et al., 435/69.7, 5, 69.1, 172.3, 252.3, 320.1; 530/387.3, 387.5 [IMAGE AVAILABLE]

US PAT NO: 5,166,050 [IMAGE AVAILABLE]

L9: 35 of 41

ABSTRACT:

Methods and composition for HIV diagnosis and treatment using monoclonal antibodies reactive with one or more neutralizing regions of HIV proteins, using the **peptides** or homologs thereof from that region, and using related nucleic acid segments. Exemplary neutralizing regions include selected portions of the env and gag genes from various HIV isolates. Monoclonal antibody secreting cell lines include HIV-gp110-1, -2, -3, -4, -5 and -6 (A.T.C.C. Accession Nos. HB9175, HB9176, HB9177, HB9405, HB9406 and HB9404, respectively) and HIV-p25-2, -3, -6 and -7 (A.T.C.C. Accession Nos. HB9407, HB9408, HB9409 and HB9410, respectively).

35. 5,166,050, Nov. 24, 1992, Monoclonal antibodies and **peptides** useful in treating and diagnosing HIV infections; Mary K. Shriver, et al., 435/5; 424/139.1, 148.1, 188.1, 208.1; 435/70.21, 172.2, 339.1; 530/388.1, 388.35, 389.4, 864, 868 [IMAGE AVAILABLE]

US PAT NO: 5,155,027 [IMAGE AVAILABLE]

L9: 36 of 41

ABSTRACT:

Methods for producing secreted receptor analogs and biologically active peptide dimers are disclosed. The methods for producing secreted receptor analogs and biologically active peptide dimers utilize a DNA sequence encoding a receptor analog or a peptide requiring dimerization for biological activity joined to a dimerizing protein. The receptor analog includes a ligand-binding domain. Polypeptides comprising essentially the extracellular domain of a human PDGF receptor fused to dimerizing proteins, the portion being capable of binding human PDGF or an isoform thereof, are also disclosed. The polypeptides may be used within methods for determining the presence of and for purifying human PDGF or isoforms thereof.

36. 5,155,027, Oct. 13, 1992, **Method** of producing secreted receptor analogs and biologically active peptide dimers; Andrzej Z. Sledziewski, et al., 435/69.7, 172.3; 530/350, 388.22, 389.3 [IMAGE AVAILABLE]

US PAT NO: 5,126,433 [IMAGE AVAILABLE]

L9: 37 of 41

ABSTRACT:

A single-stranded nucleic acid molecule which encodes an amino acid sequence comprising at least a portion of a T4 glycoprotein is provided. Additionally, amino acid sequences which comprise at least a portion of a T4 glycoprotein and are useful as a prophylaxis for treating a subject with acquired immune deficiency syndrome are provided. These amino acid sequences, are capable of specifically forming a complex with a human immunodeficiency virus **envelope** glycoprotein and which are soluble in an aqueous solution. Monoclonal antibodies directed to the water-soluble amino acid sequences of the present invention may be used as vaccines for immunizing a subject against acquired immune deficiency syndrome.

37. 5,126,433, Jun. 30, 1992, Soluble forms of the T cell surface protein CD4; Paul J. Maddon, et al., 530/395, 350, 380, 387.2, 387.9, 389.1 [IMAGE AVAILABLE]

US PAT NO: 5,110,906 [IMAGE AVAILABLE]

L9: 38 of 41

ABSTRACT:

This invention provides a therapeutic agent capable of specifically forming a complex with human immunodeficiency virus **envelope** glycoprotein which comprises a polypeptide. In one embodiment of the invention, the amino acid sequence of the polypeptide comprises the amino acid sequence shown in FIG. 6 from about +1 to about +185 fused to the amino acid sequence from about +353 to about +371. In another embodiment of the invention, the amino acid sequence of the polypeptide comprises the amino acid sequence shown in FIG. 6 from about +1 to about +106 fused to the amino acid sequence from about +353 to about +371. In yet a further embodiment of the invention, the amino acid sequence of the polypeptide comprises the amino acid sequence shown in FIG. 6 from about +1 to about +185.

This invention also provides a **method** for treating a subject infected with a human immunodeficiency virus. The **method** comprises administering to the subject an effective amount of a pharmaceutical composition comprising an effective amount of a therapeutic agent of the invention and a pharmaceutically acceptable carrier.

38. 5,110,906, May 5, 1992, Derivatives of soluble T-4; Paul J. Maddon, et al., 530/350; 435/5, 974; 530/395, 821; 930/221 [IMAGE AVAILABLE]

## ABSTRACT:

Novel methods or compositions are provided for modulating the immune system, so as to be able to selectively stimulate or inactivate lymphocytes in relation to a particular transplantation antigen content. Particularly, mixtures may be employed associated with the more common transplanatation antigens of a host population. In this manner, a large number of people can be treated, for example, by immunization, stimulation of particular T-cells or B-cells in relation to a pathogenic invasion of other aberrant state, e.g. neoplasia, treatment of autoimmune diseases, and the like. Particularly, the compositions may involve an oligopeptide involving as a first region a consensus sequence and an epitope or the first region may be joined to a second region comprising an antibody target sequence which is capable of competing with an epitopic site of an antigen of interest.

39. 5,019,384, May 28, 1991, Immunonodulating compositions and their use; Malcolm L. Gefter, et al., 424/184.1, 185.1, 186.1, 190.1, 204.1, 234.1, 265.1, 272.1 [IMAGE AVAILABLE]

US PAT NO: 4,983,387 [IMAGE AVAILABLE]

L9: 40 of 41

## ABSTRACT:

Vaccines effective in the **inhibition** of infection caused by the family of retroviruses, HTLV-III, Human T-Cell Leukemia Virus, LAV, Lymphadenopathy-associated virus, ARV-2, AIDS-Related Virus, (AIDS and AIDS-Related Complex) have been developed from an antisera prepared against thymosin .alpha..sub.1 (T.alpha..sub.1), a thymic hormone, as well as from antisera to synthetic peptide fragments of T.alpha..sub.1 and antisera to synthetic peptide inclusive of amino acid positions 92-109 of the p17 gag core protein of HTLV-III, LAV and ARV-2. In this 18 amino acid primary sequence that is a 44 to 50% homology between the gag protein and T.alpha..sub.1. Immunoglobulin (IgG)- enriched preparations of the T.alpha..sub.1 antisera have enhanced activity in blocking viral replication. A diagnostic test capable of directly detecting the presence of HTLV-III, LAV, ARV-2 and related retroviruses associated with AIDS and ARC is also described.

40. 4,983,387, Jan. 8, 1991, **HIV** related **peptides**, immunogenic antigens, and use therefor as subunit vaccine for AIDS virus; Allan Goldstein, et al., 424/188.1, 196.11, 208.1; 530/324, 325, 326, 345, 388.23, 389.2, 403, 806, 807; 930/221 [IMAGE AVAILABLE]

US PAT NO: 4,870,023 [IMAGE AVAILABLE]

L9: 41 of 41

## ABSTRACT:

The present invention is directed to recombinant baculoviruses which encode fusion polyhedrin proteins capable of forming occlusion bodies containing foreign **peptides**. The recombinant baculoviruses of the invention are formed by insertion into or replacement of regions of the polyhedrin gene that are not essential for occlusion body formation, with foreign DNA fragments by recombinant DNA techniques. The recombinant occlusion bodies produced in accordance with the present invention have uses in vaccine formulations, immunoassays, immobilized enzyme reactions, as biological insecticides, and as expression vectors.

41. 4,870,023, Sep. 26, 1989, Recombinant baculovirus occlusion bodies in vaccines and biological insecticides; Malcolm J. Fraser, et al., 435/235.1, 69.3, 69.7, 172.3, 243, 320.1; 530/350, 820, 826; 536/23.1, 23.4; 930/10, 220; 935/32, 57, 70 [IMAGE AVAILABLE]

E12        2        SASUGA, MASUMI/IN  
          USPAT        1        SASUGA, MITSUO/IN

=> s e2

L10        1 "SASTRY, JAGANNADA K"/IN

=> d l10 ab cit 1

US PAT NO:        5,603,933 [IMAGE AVAILABLE]

L10: 1 of 1

ABSTRACT:

Disclosed are compositions and methods for use in viral binding and inactivation and in protecting cells from viral infection, particularly, for use in protecting target human CD4.sup.+ cells from infection by HIV. Peptides including short sequences from CD4 are identified as being particularly effective at binding to gp120 and inhibiting or reducing HIV infection of human CD4.sup.+ cells by steric hinderance or catalytic inactivation of gp120. The invention thus encompasses improved CD4-based peptide compositions and therapeutic formulations with viral binding and HIV-inhibitory activity.

1. 5,603,933, Feb. 18, 1997, CD4 peptides for binding to viral envelope proteins; Victor A. Dwyer, IV, et al., 424/185.1; 435/5; 514/15, 16, 17, 18; 530/328, 329, 330, 402 [IMAGE AVAILABLE]

1      USPAT                              1      ARLOT, PIERRE/IN  
E12      USPAT                              3      ARLOTT, COLIN/IN

=> s e1

L11                      4 "ARLINGHAUS, RALPH B"/IN

=> d l11 ab cit 1-4

US PAT NO:           5,603,933 [IMAGE AVAILABLE]                      L11: 1 of 4

ABSTRACT:

Disclosed are compositions and methods for use in viral binding and inactivation and in protecting cells from viral infection, particularly, for use in protecting target human CD4.sup.+ cells from infection by HIV. Peptides including short sequences from CD4 are identified as being particularly effective at binding to gp120 and inhibiting or reducing HIV infection of human CD4.sup.+ cells by steric hinderance or catalytic inactivation of gp120. The invention thus encompasses improved CD4-based peptide compositions and therapeutic formulations with viral binding and HIV-inhibitory activity.

1. 5,603,933, Feb. 18, 1997, CD4 peptides for binding to viral envelope proteins; Victor A. Dwyer, IV, et al., 424/185.1; 435/5; 514/15, 16, 17, 18; 530/328, 329, 330, 402 [IMAGE AVAILABLE]

US PAT NO:           5,369,008 [IMAGE AVAILABLE]                      L11: 2 of 4

ABSTRACT:

The present invention provides methods for detecting and quantitating BCR-ABL gene products and other abnormal ABL gene products of Ph.sup.1 -positive leukemic cells. The invention further provides methods for determining the relative number of leukemic cells compared with normal ABL cells to assess the tumor burden of a patient. In another aspect, the methods of the present invention can be used to determine a specific phase of leukemia, particularly chronic-phase CML.

2. 5,369,008, Nov. 29, 1994, Methods for the detection of BCR-ABL and abnormal ABL proteins in leukemia patients; **Ralph B. Arlinghaus**, et al., 435/7.23, 15, 183, 184, 814; 436/63, 64, 514, 813; 530/388.8, 388.85 [IMAGE AVAILABLE]

US PAT NO:           5,128,319 [IMAGE AVAILABLE]                      L11: 3 of 4

ABSTRACT:

An active peptide consisting essentially of 7 to about 30 residence and having a sequence that corresponds to a conserved domain of an HIV protein is disclosed, as is a multimer containing that peptide, an aqueous composition containing the multimer and methods of using and making the same. The aqueous composition containing an immunologically effective amount of an active peptide multimer, when introduced into an immunocompetent host animal in an immunologically effective amount, is capable of inducing cellular immunity against the native HIV protein to which the active peptide of the multimer corresponds in sequence, but is not capable of inducing production of antibodies that immunoreact with that native HIV protein.

3. 5,128,319, Jul. 7, 1992, Prophylaxis and therapy of acquired immunodeficiency syndrome; **Ralph B. Arlinghaus**, 424/188.1, 208.1;

ABSTRACT:

Disclosed are peptidyl-resin conjugates made up of an immunogenic/antigenic peptide conjugated to a polyamide resin, wherein the peptide incorporates a helper T-cell epitope. The inclusion of a T-cell epitope in this peptide sequence provides particular benefits in the preparation of site-directed reagents intended as immunogens. In exemplary studies, a synthetic peptide predicted from Abelson murine leukemia virus abl oncogene (residues 389-403) was synthesized with a T-cell active epitope of 7 amino acids placed at its N-terminus (T-abl-resin). The T-abl-resin construct was found to greatly stimulate the immune response giving significantly higher specific antibody titers than abl-resin controls.

4. 5,126,399, Jun. 30, 1992, Methods and compositions for the preparation and use of site-directed immunologic reagents; **Ralph B. Arlinghaus**, et al., 525/54.1; 514/2, 13, 14, 15, 16 [IMAGE AVAILABLE]